MANGA STUDIO® 5

The Standard in Manga & Comic Illustration

USER GUIDE

SMITHMICRO SOFTWARE

CELSYS

Changes in Ver.5.0.4

Additions and/or changes in Manga Studio 5.0 between Ver.5.0.3 and Ver.5.0.4 are as follows.

Memo

Functions added in Manga Studio 5.0 between Ver.5.0.3 and Ver.5.0.4 are marked with a "*" in the text.

Changes Common to Manga Studio 5.0

- "Undo"

  The maximum number of operations that can be undone has been increased to 200.

Memo

The maximum number of operations that can be undone can be configured in [Preferences] dialog box → [Performance] → [Undo count]. For details, see "Preferences [Windows]" → "Performance" .

- "Copy" "Paste"

  You can now copy and paste images between "Paint Tool SAI" or "openCanvas" and "Manga Studio 5.0" while keeping the original opacity.

Important

- **"Paint Tool SAI" allows you to copy and paste images between applications while keeping the original opacity if the application's license is formally registered. The opacity will not be kept in products without formal registration, such as trial versions.**
- **"openCanvas" allows you to copy and paste images between applications while keeping the original opacity, if its version is Ver.5.5.20 or later. The function is also supported by the trial versions.**

- "Sharp"

  "Sharp, Sharp (Strong) *" have been added. Selecting the menu item allows you to sharpen images and the like by enhancing the contrast at the image borders.

Explanation: Balloons and Text

- "Changing the Position and Size of the Text"

  You can now transform around the center of rotation by pressing the [Alt] key during transform.

- "Change color of line to drawing *"

  You can now change the color of (non-transparent) lines in a drawing to that selected in [Drawing color].

- "Explanation: Editing a Vector Layer"

  You can now perform the following operation while operating a drawing on the vector layer with the [Object] sub tool of the [Operation] tool.

  - "Transforming a Line"

    Transform around the center of the frame by pressing the [Alt] key during transform.

- "Convert layer"

  [Stream line] layer and [Saturated line] layer have been added to [Type] on the [Convert layer] dialog box.
  The expression color of the [Stream line] layer and [Saturated line] layer can be changed when selected.

- "Combine copies of displayed layer *"

  You can now copy and combine visible layers. After combine, the original layers remain as they are.

- "Ruler"

  You can now create a [Guide] by dragging the [Ruler] in the canvas direction, as well as delete it by dragging it outside of the canvas with the [Object] sub tool.

Tool-type Palette

- "Migrate tool preferences → From Manga Studio 4.0 *" "Migrate tool preferences → From IllustStudio [Windows] *"

  You can now import the text style settings when migrating the Manga Studio 4.0 or IllustStudio tool preferences using the [Tool] palette menu.

Layer property Palette

- "Functions of Layer property Palette"
  - "Border effect"
    [Edge] on the [Layer property] palette has been changed to [Border effect]. [Watercolor] effect is now available in addition to the [Edge] effect supported in earlier versions.
  - "Tone"
    [Posterization] has been added. You can configure the posterization of a tone by using the [Posterization control].

Explanation: Balloons and Text

- "Creating a Balloon"

  You can now create a new balloon layer below a text layer by turning off [Combine with the text in the drawing area] under [Create balloon] on the [Sub tool detail] palette. However, note that when a balloon is created in this way, balloon and text cannot be moved in conjunction.

Explanation: Ruler

- "Snapping Fill/Auto select to Symmetrical Ruler"

  When using the [Fill] tool or the [Magic Wand] tool, you can now fill or select snapped to a [Symmetrical ruler].

- "Right-click Menu during Object Tool Use"

  Right clicking [Focus curve] ruler, [Parallel curve] ruler or [Multi-curve] ruler when the [Object] sub tool of the [Operation] tool is selected, displays a menu that allows you to [Add control point], [Delete control point] and/or [Switch corner].

Explanation: Perspective ruler

- "Snapping to Figure, Straight Line or Polyline"

  You can now draw [Figure], [Balloon], [Frame border], and others whose input method is figure, straight line or polyline by snapping to a perspective ruler.

Explanation: Creating and Editing Stream Lines and Saturated Lines

You can now create stream lines and saturated lines. For how to create and edit stream lines and saturated lines, see "Explanation: Creating and Editing Stream Lines and Saturated Lines *" .

Other

The drawing speed of simple vector lines, without anti-aliasing, has been improved.

Changes in Manga Studio 5.0 EX

- "New" "Batch import" "Batch export" "Continuous scanning"

  When specifying the management folder destination, you can now create the management folder if the specified folder is empty.

- "Preferences [Mac OS X]" "Preferences [Windows]"

  "Page Management [EX] *" has been added to the [File] tab, which allows you to configure auto save of page files, as well as the method for opening a page from the [Page manager] window.

- "Open page *" "Open page with new tab *"

  [Open page] and [Open page with new tab] have been added to the [Story] menu.

  - Selecting "Open page *" first closes the page file you were editing to then open the page file selected from the [Page manager] window.
  - Selecting "Open page with new tab *" opens the page file selected from the [Page manager] window on a new tab while keeping the page file you were editing open.

- "Batch process *"

  [Batch process], [Batch Import], [Batch export] and [Continuous Scan] under the [Story] menu
  have been relocated as sub menu items of [Batch process].

- "LT conversion of layer [EX] *"

  [LT conversion of layer] has been added to [Layer] menu. Allows you to separate color images and 3D layers into outlines (line drawings) and tones and convert each of them into different layers. It allows you to obtain manga-like expressions with tone gradation.

- "Extract line [EX]"

  [Extract line] has been added to the effects available on the [Layer property] palette. Allows you to extract outlines from a selected layer. Furthermore, clicking [Execution of LT conversion of layer] allows you to separate a selected layer into outlines (line drawings) and tones and convert each of them into different layers.

- "Saving Files Created from a Single-page File"

  You can now configure [Binding point] and [Start page] when adding a page file to a single-page canvas.

Differences in Functionality between Manga Studio 5.0 EX and Manga Studio 5.0

With Manga Studio 5.0 EX, you can use the functions below in addition to all of the functions available in Manga Studio 5.0.

Memo **For details on Manga Studio 5.0 EX, see the Creative the "Manga Studio 5.0" Web page.**

Menu

- "New"

  Allows you to configure the number of pages, book information, binding point and start page for a manga or comic file.

- "Open"

  Allows you to import Manga Studio 4.0 book files (extension: cst) and CLIP STUDIO name files (extension: csnf).

- "Print settings"

  Supports double leaf printing and 2-page spread printing.

- "Print"

  Supports multi-page printing.

- "Story Menu [EX]"

  The [Story] menu allows you to manage manga or comic works composed of multiple pages. You can manage how to display a page file, add pages, manage the manga or comic book information, and so on. You can also display the [Page manager] window.

  For how to operate the [Page manager] window, also see "Explanation: Page Management [EX]" .

- "LT conversion of layer [EX] *"

  Allows you to separate color images and 3D layers into outlines (line drawings) and tones and convert each of them into different layers. It allows you to obtain manga-like expressions with tone gradation.

Layer property Palette

- "Extract line [EX]"

  Allows you to extract outlines from a selected layer. Furthermore, clicking [Execution of LT conversion of layer] allows you to separate a selected layer into outlines (line drawings) and tones and convert each of them into different layers.

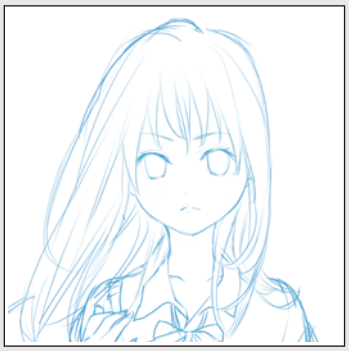
  Creative Activity Support Site

Drawing Illustrations with Manga Studio 5.0

The following is an introduction to functions used for drawing a simple color illustration with Manga Studio 5.0.

Pencilling

Draw a draft to have an overall image of the illustration.



- To create a new canvas (file) → "New"
- To select a tool → "Tool Palette"
- To draw with pencil touch → "Pencil Tool"
- To erase a drawn line → "Eraser Tool"

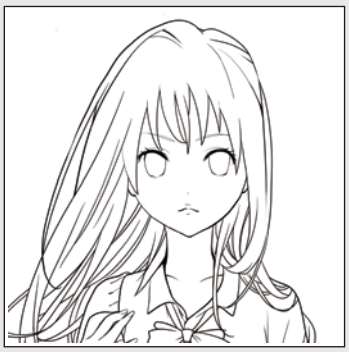
Memo

- **When interrupting an ongoing illustration, be sure to save it. If you quit without saving, the illustration on the canvas will be lost. To save the file, select [File] menu → [Save].**
- **You can change the canvas view to make drawing easier. To change the canvas scale, see "Zoom Tool" . To zoom in/out the canvas view or change the display position, see "Move Tool" .**

Inking

Ink over based on the draft. This step is called inking.

Create a layer for inking, and create the line drawing.



- To create a new layer → "New raster layer"
  Create a new layer for inking.
- To select a layer → "Selecting a Layer" 5
- To draw with pen touch → "Pen Tool"
- To adjust the thickness of the pen → "Tool property Palette"

Memo

The [Eraser] tool can also erase lines drawn with the [Pen] tool and the like. Furthermore, by selecting [Edit] menu → [Undo], you can cancel the last operation.

Coloring

Paint the illustration.

As with inking, create a new layer for coloring.

- To hide a layer → "Switching Show/Hide for a Layer"
  Hide the draft layer to make coloring easier.
- To create a new layer → "New raster layer"
- To select a layer → "Selecting a Layer"
- To select a color → "Color wheel Palette" / "Color set Palette"
  To select a color, you can use the [Color wheel] palette or the [Color set] palette.
- To fill a closed area → "Fill Tool"
- Creating a monochrome layer and filling it allows you to change colors easily. For details, see "Fill" .
- Creating a gradient layer allows you to add gradation effect to an illustration. For details, see "Gradient" .

Memo

To fill other layers while keeping the line drawing layer, select [All layers] for [Multiple referring] on the [Tool property] palette at the time of selecting the [Fill] tool.

Finishing and Saving

Add shadow and highlight to add depth to the illustration.

Finally, paint the background. Save the data when the illustration is complete.

- To create a new layer → "New raster layer"
  Create a new layer to add shadow and highlight.
- To select a layer → "Selecting a Layer"
- To change the stacking order of a layer → "Changing the Stacking Order of a Layer"
  The stacking order of a layer can be changed with the [Layer] palette. Shadow and highlight must be placed above the colored layers while background must be placed below the colored layers.

Memo

If the drawn content is not displayed on the canvas, move the layer upwards. Changing the order in which layers are stacked may solve the problem.

- To select a color → "Color wheel Palette" / "Color set Palette"
  Select the color for shadow and highlight from the [Color wheel] palette and [Color set] palette.
- To draw highlight and shadow → "Pen Tool" / "Airbrush Tool"
  Using the [Air brush] tool allows you to add blur effect.
- To paint the background → "Fill Tool"
- To tone a layer → "Layer property palette"
  [Tonization] on the [Layer property] palette allows you to tone a layer.
- To save a file → "Save"
- To open a previously saved file → "Open"

Drawing Manga with Manga Studio 5.0

The following is an introduction to functions used for drawing a simple color manga with Manga Studio 5.0.

Paneling

Decide the layout of the panels; that is, the blueprint of the manga.

Roughly draw the storyline and place balloons and words.

- To create a new canvas (file) → "New"
- To choose a tool → "Tool Palette"
- To draw with pencil touch → "Pencil Tool"
- To erase a drawn line → "Eraser Tool"
- To create balloons and input words → "Explanation: Balloons and Text"
- Pages can be added to or deleted from the manga file. To adjust the number of pages → "Add page" / "Delete page" [EX]

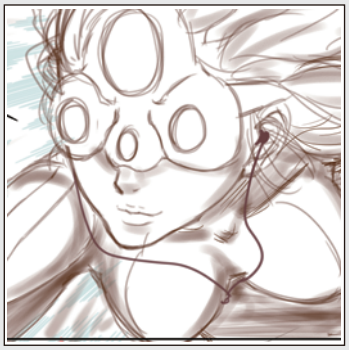
Memo

- **Changing [Unit of lenghth] to "mm" for [Ruler/Frame/Unit] → [Unit] in the Preferences dialog box will enable you to configure the canvas as if you were configuring a print size or an original on paper. For details, see "Preferences [Windows]" → "Ruler/Frame/Unit" .**
- **When interrupting an ongoing manga, be sure to save it. If you quit without saving, the manga on the canvas will be lost. To save the file, select [File] menu → [Save].**
- **You can change the canvas view to make drawing easier. To change the canvas scale, see "Zoom Tool" . To zoom in/out the canvas view or change the display position, see "Move Tool" .**
- **The manga file allows for 2-page spreads. To create 2-page spreads, see "Combine pages" . [EX]**

Frame Cut and Pencilling

Cut frames based on the paneling to draw the draft.

Create a draft layer and draw the draft.



- To lay out panels → "Explanation: Frame Cut"
- To create a new layer → "New raster layer"
  Create a new layer for pencilling.
- To select a layer → "Selecting a Layer"
- To draw with pencil touch → "Pencil Tool"
- To adjust the thickness of the lines → "Tool property Palette"

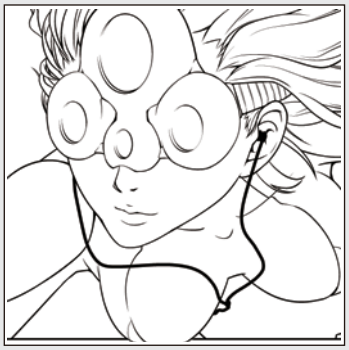
Memo

Even if you draw on a layer whose expression color is monochrome or gray, you can replace black with any color by using the [Layer color] function. This is useful to reduce the load on your computer. The layer color is configured in the [Layer property] palette. For details, see "Functions of Layer property Palette"

Inking

Ink over based on the draft. This step is called inking.

Create a layer for inking and create the line drawing.



- To hide a layer → "Switching Show/Hide for a Layer"
  Hide the draft layer to make coloring easier.
- To create a new layer → "New raster layer"
- To select a layer → "Selecting a Layer"
- To draw with pen touch → "Pen Tool"
- To rotate the canvas to draw a line → "Move Tool"
- To change the shape and size of a balloon → "Explanation: Balloons and Text"

Memo

- **Changing [Unit of lenghth] to "mm" for [Ruler/Frame/Unit] → [Unit] in the Preferences dialog box will enable you to configure the canvas as if you were configuring a print size or an analog original. For details, see "Preferences [Windows]" → "Ruler/Frame/Unit" .**
- **When interrupting an ongoing manga, be sure to save it. If you quit without saving, the manga on the canvas will be lost. To save the file, select [File] menu → [Save].**
- **You can change the canvas view to make drawing easier. To change the canvas scale, see "Zoom Tool" . To zoom in/out the canvas view or change the display position, see "Move Tool" .**

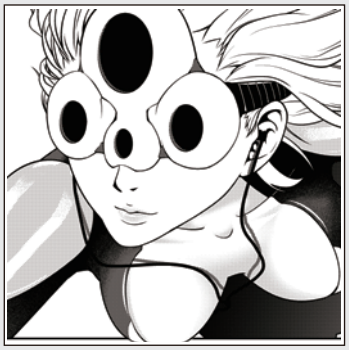
Filling and Toning

Fill in one color and add tone.

Create monochrome layers and fill in monochrome layers.

Paint areas to be toned.

Create gradation layers for areas where gradation effect will be added.



- To hide a layer → "Switching Show/Hide for a Layer"
- To create a new layer → "New raster layer"
- To select a layer → "Selecting a Layer"
- To create a marquee → "Marquee tool" / "Magic Wand Tool"
- To create a monochrome layer → "Fill"
  Create monochrome layers in areas where you want to stack mesh tone or fill in one color.
- To create a gradient layer → "Gradient"
- To tone a layer → "Layer property palette"
  Turning on [Tone] on the [Layer property] palette adds tone to a layer.

Finishing and Saving

Add effect, hightlight, sound effects to finish the manga.

Save the data when the manga is complete.

- To create a new layer → "New raster layer"
- To select a layer → "Selecting a Layer"
- To change the stacking order of a layer → "Changing the Stacking Order of a Layer"
- To use a ruler → "Explanation: Ruler"

Memo **With rulers, you can draw complicate effect lines easily.**

Before You Read This Guide

Thank you for choosing Manga Studio 5.0. The following describes points to keep in mind when reading this guide.

Regarding This Guide

This guide is a manual that introduces users to the features of Manga Studio 5.0. It describes functions of the menu, palettes, tools, and so on.

For setting items on the [Tool property] palette, including the [Sub tool detail] palette, refer to the "Manga Studio 5.0 Tool Setting Guide".

Regarding The Content of This Guide

This guide (including data) has been prepared and edited based on the product program available as of February 2014 and may differ from the actual product program specifications.

Regarding Operations Described in This Guide

Operations in this guide are described based on the Windows version unless otherwise noted.

If you are a Mac OS X user, replace and read as follows: By replacing, operation on both Windows and Mac OS X has the same meaning.

Windows	Mac OS X
[Alt] key	[Option] key
[Ctrl] key	[Command] key
[Enter] key	[Return] key
[Backspace] key	[Delete] key
Right click (of mouse button)	Mouse click with the [Control] key down

Symbols Used in This Guide

In this guide, symbols are used for operation-related comments. The symbols have the following meaning:

Indicates items that may be easily mistaken or matters to be aware of when using Manga Studio 5.0.

Indicates tips and supplementary information useful when using Manga Studio 5.0.

References

References to other parts of this guide as well as other documents are indicated using "" (double quotation marks).

Regarding the Manga Studio 5.0 [Editions]

Manga Studio 5.0 is available in two editions: Manga Studio 5.0, and Manga Studio 5.0 EX. This guide describes the operating procedure of all three editions. Functions restricted to an edition are marked with a symbol indicating the edition.

Unmarked	Indicates a function common to Manga Studio 5.0 and Manga Studio 5.0 EX.
[EX]	Indicates a function available only in Manga Studio 5.0 EX.

Regarding Manga Studio 5.0 Initialization Start

In the case a problem occurs while working with Manga Studio 5.0, you can start it by initializing its settings. Double clicking the icon on the desktop while holding the [Shift] key down displays a screen that allows you to select the items to initialize. Clicking [OK] after selecting the items initializes and starts Manga Studio 5.0.

! Important **The settings of items selected for initialization are cleared and restored to their state immediately after installation.**

Trademarks and Copyrights

- CELSYS, CLIP STUDIO, CLIP, QUMARION, IllustStudio and Manga Studio 4.0 are trademarks or registered trademarks of CELSYS, Inc.
- Manga Studio® is registered trademarks of SmithMicro, Inc.
- Microsoft and Windows are registered trademarks or trademarks of Microsoft Corporation in the United States and other countries.
- Apple and the Macintosh name are trademarks or registered trademarks of Apple Inc. in the United States and other countries.
- QUMA is a registered trademark of SoftEther Corporation.
- Adobe, the Adobe logo, Adobe Reader and Photoshop are trademarks of Adobe Systems Incorporated in the United States and other countries.
- All other company names and product names described herein are trademarks or registered trademarks of their respective holders.
- No part of this guide (including data) may be reproduced or copied in any form or by any means without permission from the copyright holder, except when so required by law.

Menu

This chapter introduces menu functions in Manga Studio 5.0.

Manga Studio 5.0 Menu [Mac OS X]

The following functions are available in the Manga Studio 5.0 menu.

About Manga Studio 5.0 [Mac OS X]

Displays the product information screen of your Manga Studio 5.0. There, you can check information such as the version of your Manga Studio 5.0.

Version information [Mac OS X]

Displays the screen for checking the version of your Manga Studio 5.0.

Preferences [Mac OS X]

Clicking [Manga Studio 5.0] menu → [Preferences] displays the [Preferences] dialog box. Configures Manga Studio 5.0 preferences such as Layer, Tool, Performance and the like.

Preferences can be configured in the same way as for Windows, except for a few items. For details on the operating procedure, see "Preferences [Windows]" .

Shortcut settings [Mac OS X]

Shortcuts can be configured for some menu items, tool property items and brush sizes. Settings can be configured in the same way as for Windows. For details on the operating procedure, see "[Shortcut settings] dialog box" .

Modifier key settings [Mac OS X]

The [Command], [Option], [Shift] and [Space] keys individually or combined, the mouse wheel, right click, tail switch can be assigned to tools to perform operations such as temporary tool switch, brush size change, and so on.

Settings can be configured in the same way as for Windows. For details on the operating procedure, see "Modifier key settings [Windows]" .

Command bar settings [Mac OS X]

Commands can be added to the [Command bar] by editing the settings.

Settings can be configured in the same way as for Windows. For details on the operating procedure, see "Command bar settings [Windows]" .

Tab-Mate Controller [Mac OS X]

Assigns Manga Studio 5.0 operations to the Tab-Mate Controller. Furthermore, assigns commands to the Tab-Mate Controller [Quick menu].

Settings can be configured in the same way as for Windows. For details on the operating procedure, see "Tab-Mate Controller [Windows]" .

Pen Pressure Settings [Mac OS X]

Adjusts the pen pressure detection level for using a tablet.

Settings can be configured in the same way as for Windows. For details on the operating procedure, see "Pen Pressure Settings [Windows]" .

QUMARION [Mac OS X]

Enables the use of QUMARION in Manga Studio 5.0, as well as import/export of calibration information.

Settings can be configured in the same way as for Windows. For details on the operating procedure, see "QUMARION [Windows]" .

Register license [Mac OS X]

Registers the license for Manga Studio 5.0 started as a trial version. For details on license registration, see the "Manga Studio 5.0" Web page.

Check license [Mac OS X]

If connecting to the Internet was not possible during license check, a license check error is displayed.

By selecting [Manga Studio 5.0] menu → [Check license], you can manually check the license beforehand, independently of the number of remaining days. However note that in this case, the fixed period of time to the next license check will be counted from the day on which you performed the license check.

Memo

- **The use of [Check license] does not extend the trial period of the trial version (when time-limited trial version is registered).**
- **When the license check becomes disabled because the trial period has expired or any other reason, continued use of the application is possible as a feature-limited trial version.**

Install Material [Mac OS X]

Allows you to install materials by selecting [File] menu → [Install Material] and starting the installer.

Important

Running [Install Material] closes Manga Studio. Be sure to save your data and the like before running [Install Material].

Organaize Materials [Mac OS X]

Reorganizes material database from actual material data.

Reset Installed Materials [Mac OS X]

Resets preinstalled material to initial state.

Memo

- **Name, property, save folder, etc. of preinstalled material are reset to initial state.**
- **Materials, which are added or created by the user, are not initialized.**

Quit Manga Studio [Mac OS X]

Closes Manga Studio 5.0.

File Menu

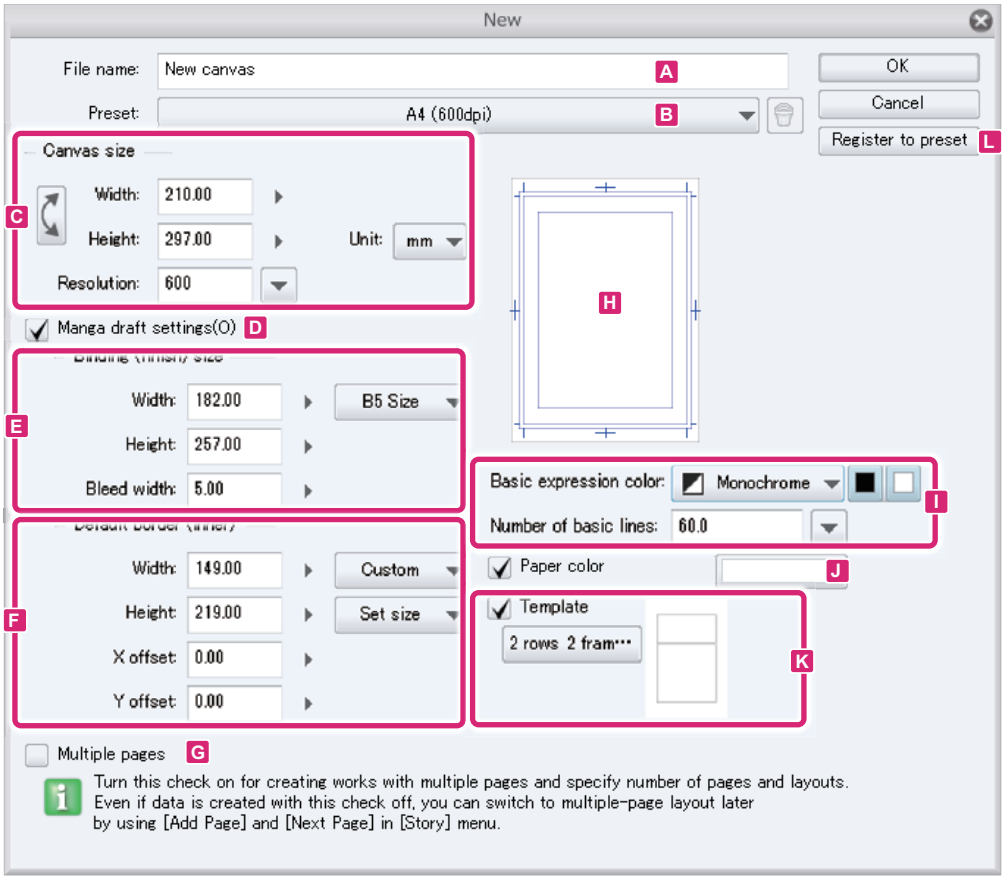
The [File] menu is mainly for performing file input/output operations.

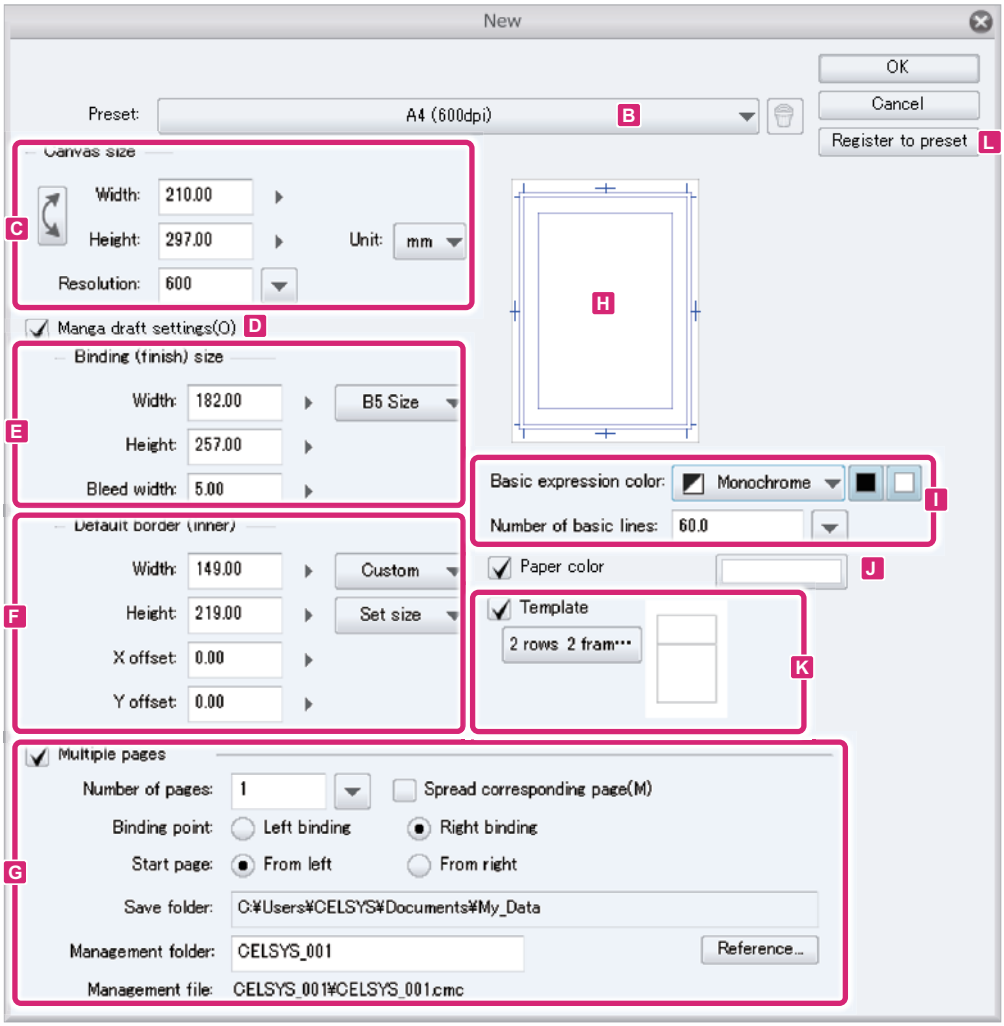
New

Selecting the menu item displays the [New] dialog box.

Prepares a canvas/page file necessary for creating illustrations/manga as a data file.

[New] Dialog Box





For [Multiple pages] ON

A. File name

When [Multiple pages] is turned off, input a name for the file to save.

Important **[File name] displays only when [Multiple pages] is turned off.**

B. Preset

Allows you to select settings such as [Canvas size], [Final size] and [Bleed/Default border] from a list.

When custom settings exist, the icon on the right side allows you to delete a setting.

Memo

- **Use [Final size] to configure the size when bound in a book.**
- **[Custom] can be selected only when the default size settings have been changed.**

C. Canvas size

Configures the size of the canvas for an original.

Memo

- When [Manga draft settings] is turned off, [Canvas size] becomes the final size.
- When [Manga draft settings] is turned on, [Binding (finish) size] becomes the final size when bound in a book.

(1) Swap width/height

Swaps the width and height of the canvas.

(2) Width

Configure the width of the canvas.

(3) Height

Configure the height of the canvas.

(4) Resolution

Input the resolution of the canvas. Clicking ▼ allows you to select a resolution from 72 to 1200dpi.

(5) Default size (Canvas size)

Allows you to select a [Width] and [Height] for the canvas from default sizes.

Important

This item displays when [Manga draft settings] is turned off.

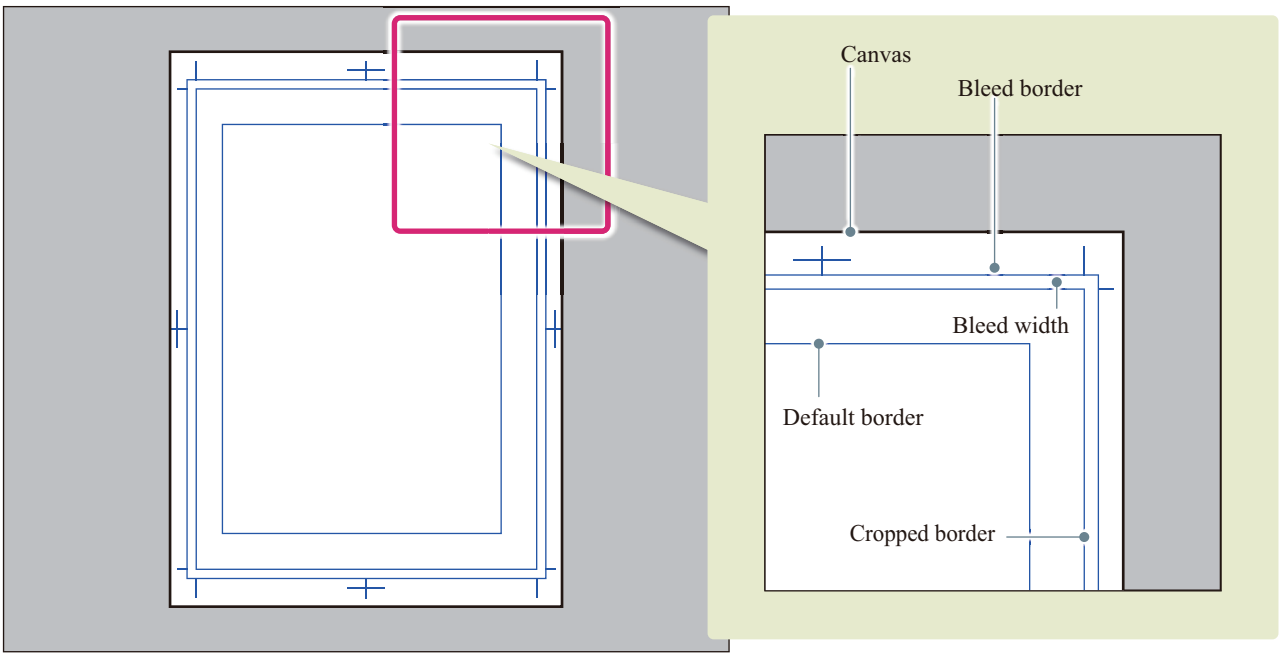
(6) Unit

Select a unit for [Width] and [Height] from [cm], [mm], [in], [px] and [pt].

D. Manga draft settings

Turning on this item creates [Crop mark], [Default border(inner)], [Cropped border] and [Bleed] on the canvas.

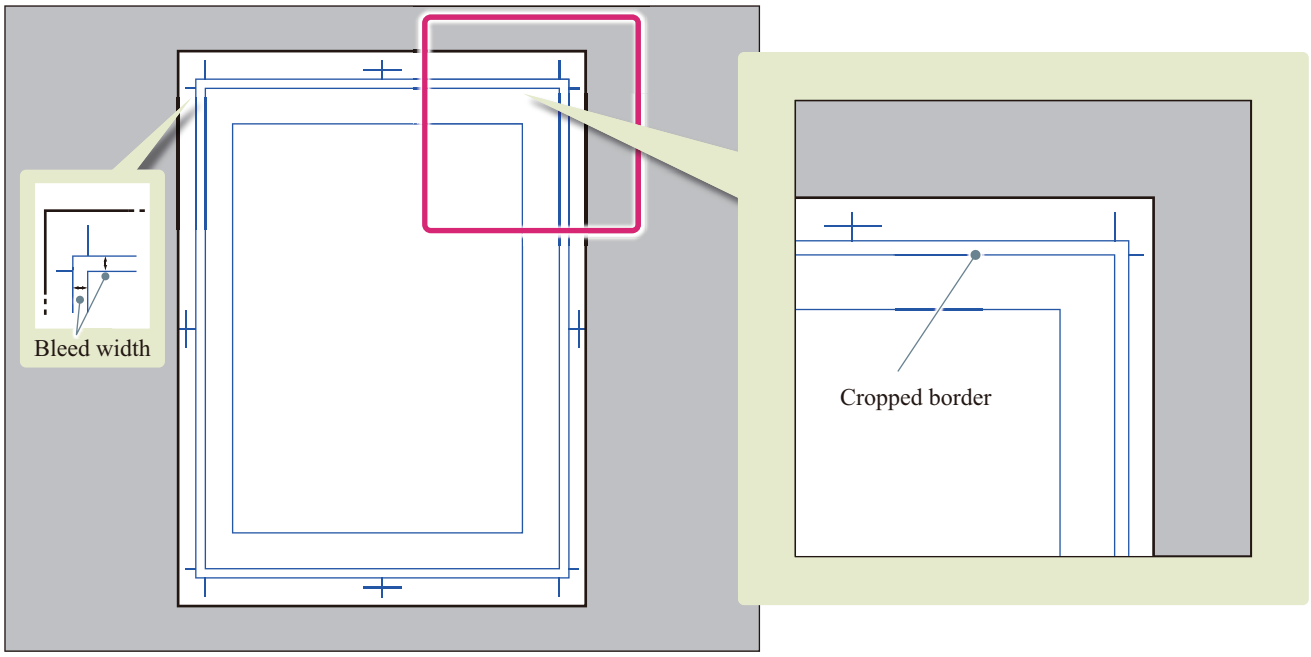
Configuring the sizes of [Bleed, [Default border] and [Canvas size] displays guides on the canvas.



E. Manga draft settings → Binding (finish) size

Configure the line at which the edge of the pages will be trimmed for binding after printing. Drawings within these dimensions are printed. Also configure the extra margin to deal with misaligned [Cropped border] lines when trimming the edges of the pages.

Important **This item displays when [Manga draft settings] is turned on.**



(1) Width

Horizontal length to print.

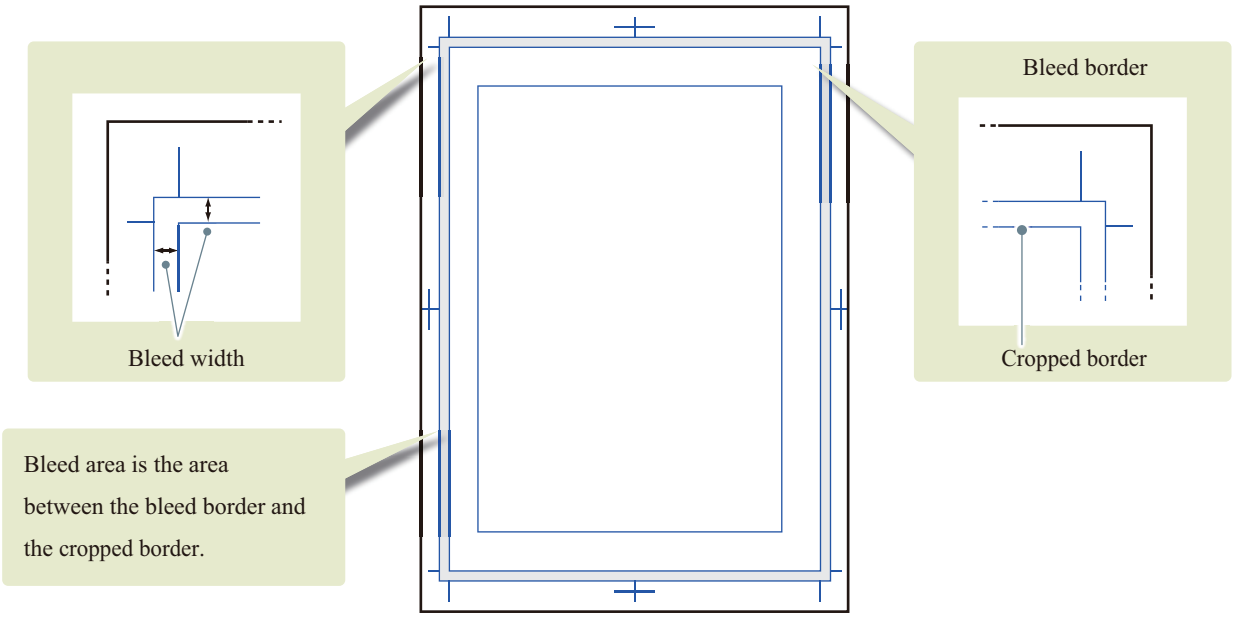
(2) Height

Vertical length to print.

(3) Bleed width

Configure the extra margin to deal with misaligned [Cropped border] lines when trimming the edges of the pages. Draw up to the bleed area to print to the edge of the pages.

The area between the bleed (the first border from the edge) and the cropped border (the second border from the edge) is the bleed area.



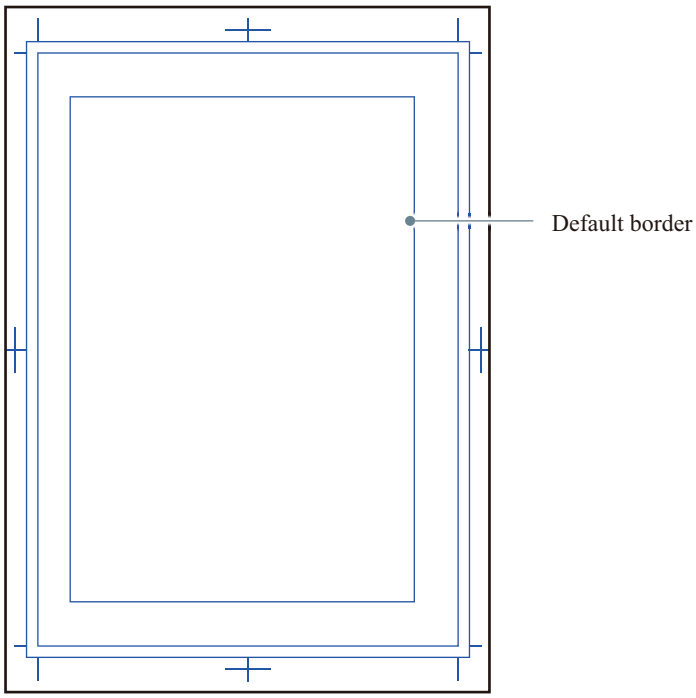
(4) Default size (Cropped border)

Allows you to select a [Width] and [Height] for the cropped border from default sizes.

F. Manga draft settings → Default border (inner)

Configure the border that will be the reference for laying out the frames. There are two ways of specifying the default border: by size and position, or by margin.

Important **This item displays when [Manga draft settings] is turned on.**



(1) Default size (Default border)

Allows you to select a [Width] and [Height] for the default border from default sizes.

(2) How to specify default border

Configure how to specify the size and position of the default border. Displayed items vary depending on the content configured in [Default border settings].

Set size	Configures the default border based on the size and position.
Set margin	Configures the default border based on the distance from the left, right, top and bottom edges of the paper.

(3) Default border settings

Configure the size and position of the default border. Displayed items vary depending on the item selected in [How to specify default border].

Set size

Configures the default border based on the size and position.

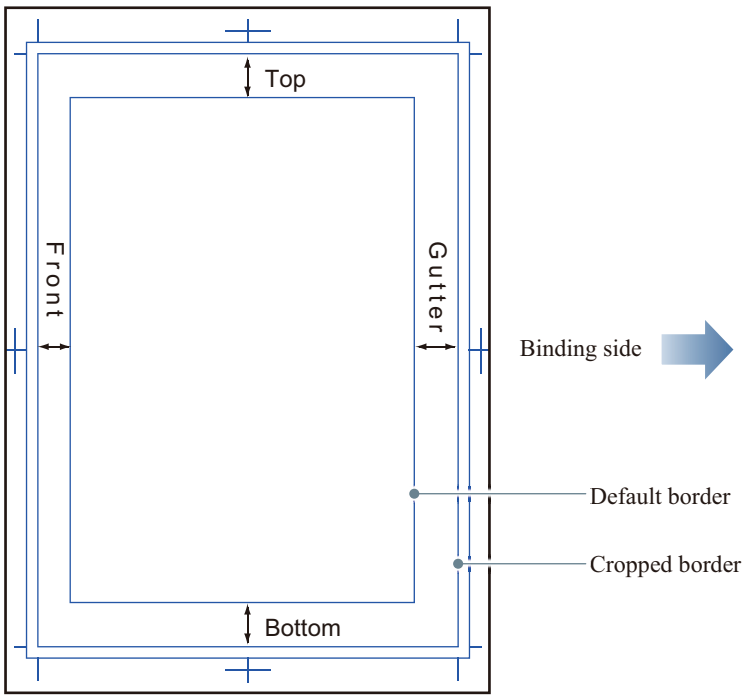
Width	Width of the [Default border].
Height	Length of the [Default border].
X offset	Horizontal position of the [Default border].
Y offset	Vertical position of the [Default border].

Memo

- **When [X offset] is 0, that means the [Default border] is centrally located with respect to the [Cropped border] on the left and right.**
- **When [Y offset] is 0, that means the [Default border] is centrally located with respect to the [Cropped border] at the top and bottom.**

Set margin

Configures the default border based on the distance from the left, right, top and bottom edges of the cropped border.



Top	Specifies the upper side of the [Default border] as the distance from the top of the cropped border.
Bottom	Specifies the lower side of the [Default border] as the distance from the bottom of the cropped border.
Gutter	Specifies the right or left side of the [Default border] as the distance from the "direction of the binding point".
Front	Specifies the right or left side of the [Default border] as the distance from the "outer direction (opposite of binding point)".

G. Multiple pages [EX]

When turned on, allows for the creation of a multi-page manga or comics.

Important

Some of the items under [Multiple pages] may not display when the interface is optimized for touch operation. In this case, a dialog box for configuring settings such as [Binding point], [Start page], and [Management folder] will be displayed after you click [OK] on the [New] dialog box. (*)

(1) Multiple pages

When turned on, allows for the creation of a multi-page manga or comics.

(2) Number of pages

Input the number of pages to create in the input field. Clicking ▼ allows you to select the number of pages from [1], [2], [4], [8], [12], [16], [24] and [32].

(3) Spread corresponding page

When turned on, creates a 2-page spread from a pair of left and right pages.

(4) Binding point

Selects the direction in which to bind the book. Select either [Left Binding] or [Right Binding].

(5) Start page

Configures the orientation of the start page in the book.

- When the start page is a left page, select [Left].
- When the start page is a right page, select [Right].

(6) Save folder

Specifies the location where the management folder will be created. Clicking [Browse] allows you to specify the location.

Memo

In EX, manga or comics comprising multiple pages are managed by storing the management file and the two or more image files in Manga Studio 5.0 format (extension: lip) in a [Management folder]. For details, see "Regarding Management File and Page Files" .

(7) Management folder

Input a name for the management folder.

(8) Management file

Displays the management file name (extension: cmc)

H. Preview

Previews the configured [Cropped border], [Bleed/Default border], {Paper color], and so on.

I. Basic expression color

Allows you to configure the basic expression color and the like.

(1) Basic expression color

Allows you to configure the basic expression color. Select from [Color], [Gray] and [Monochrome].

(2) Drawing color

Configures the drawing color for [Gray] and [Monochrome]. Configure the color with the [Black] and [White] buttons.

Gray

The drawing color is configured as follows with the [Black] and [White] buttons.

Only black button ON	The drawing color is configured as a gradation from black to transparent.
Only white button ON	The drawing color is configured as a gradation from white to transparent.
Both black and white buttons ON	The drawing color is configured as a gradation from black to white.

Monochrome

The drawing color is configured as follows with the [Black] and [White] buttons.

Only black button ON	The drawing color is configured as black or transparent.
Only white button ON	The drawing color is configured as white or transparent.
Both black and white buttons ON	The drawing color is configured as black, white or transparent.

Memo

For details on expression color and drawing color, see "Explanation: Expression Color and Drawing Color" .

(3) Number of basic lines

Specify the number of tone (halftone dot) lines. The larger the value, the smaller will be the halftone dot.

J. Paper color

You can configure a color for the [Paper] layer. Clicking the color indicator displays the dialog box for selecting a color. Specifying a color configures it to the [Paper] layer.

Memo

- **[Paper] layer is a monochrome layer at the bottom of the data. Hiding the [Paper] layer displays transparent areas of the image on the canvas in a checkered pattern.**
- **The [Paper] layer color can be changed afterwards. To change the [Paper] layer color, double click the [Paper] layer on the [Layer] palette to display the dialog box for selecting a color.**

K. Template

Allows you to create a page file with an imported template.

Selecting the check box and clicking the button opens the [Template] dialog box. Specify the template to import to the page file in the dialog box.

(1) Template

When turned on, allows you to specify a template.

(2) Specify template

Clicking this button opens the [Template] dialog box. Specify the template to import to the page file in the dialog box.

[Template] Dialog Box

(1) Search box	Allows you to input a keyword and search for a template.
(2) Tag list	A list of tags assigned to materials displayed as buttons. Clicking a button displays the included materials in [Material list].
(3) Material list	A list of template materials. Click to select the material to import.
(4) Thumbnail [Large]	Shows the large thumbnails of the materials shown in [Material list].
(5) Thumbnail [Small]	Shows the small thumbnails of the materials shown in [Material list].
(6) Thumbnail [Detail]	Shows the thumbnails as well as information of the materials shown in [Material list].

Memo

Templates can be added from [Edit] menu → [Register layer as template material]. For details, see "Register layer as template material" .

L. Register in preset

Registers the content configured in the dialog box as [Preset].

Clicking the button opens the [Register in preset] dialog box. On the dialog box, configure the [Preset name] and [Items to be included in Preset].

[Register in preset] Dialog Box

(1) Preset name

Input a name for the [Preset] to register.

(2) Items to be included in Preset

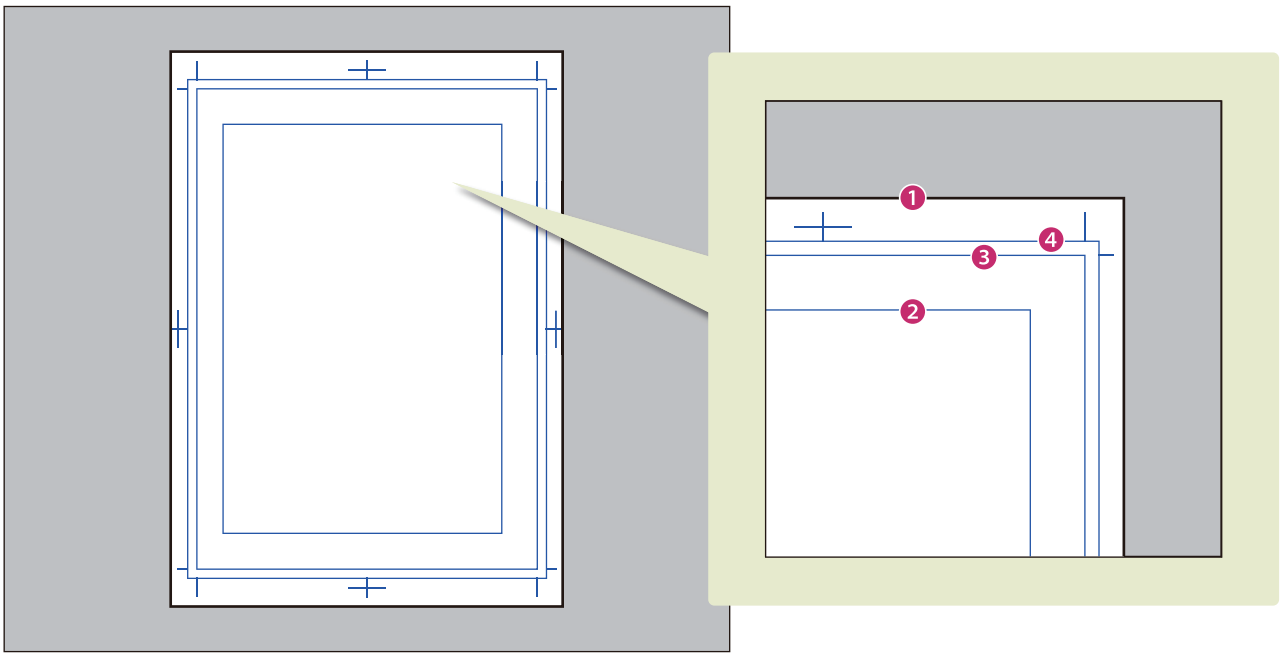
The content of the selected items will be registered in [Preset].

Memo

[Width], [Height], [Unit] and [Manga draft settings] are always registered.

Explanation: What Are Default Border, Cropped Border and Bleed Width?

In a Manga Studio 5.0 canvas, the [Default border] accommodates the frame, and the [Cropped border] and [Bleed] indicate the edges for trimming. They are collectively called [Inside dimensions].



(1) Paper size

This is the size of the entire canvas.

(2) Default border

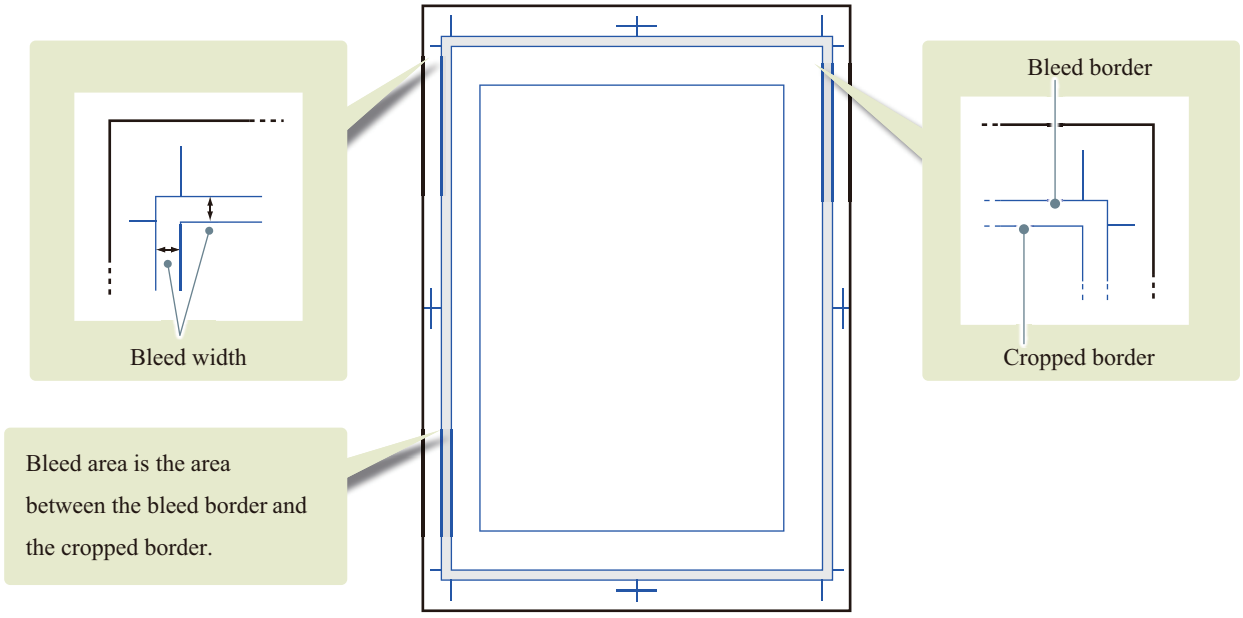
This is the reference border to lay out frames.

(3) Cropped border

This is the line at which the pages will be trimmed for binding after printing. Draw within these dimensions for drawings to be printed.

(4) Bleed

This is the extra margin to deal with misaligned [Cropped border] lines when trimming the edges of the pages. Draw up to the bleed area when you want to print to the edges of a page.



Open

Selecting [File] menu → [Open] displays the [Open] dialog box.

- File formats that can be open are: Manga Studio 5.0 format (extension: lip), IllustStudio document (extension: xpg), Manga Studio 4.0 page file (extension: cpg), BMP, JPEG, PNG, TIFF, Targa, Adobe Photoshop Document (extension: psd) and Adobe Photoshop Big Document (extension: psb).
- EX can also open Manga Studio 5.0 EX management files (extension: cmc) and Manga Studio 4.0 book files (extension: cst) and CLIP STUDIO name files (extension:csnf).

Important

- **For Manga Studio 5.0 files (extension: lip) including imported 3D data in CCR/CCRX/M3C format, the corresponding 3D data will not be displayed.**
- **When importing a IllustStudio document or Manga Studio 4.0 page file, some layers may not be imported correctly. For details, see "Regarding Import of IllustStudio/Manga Studio 4.0 Documents" .**
- **Opening a Manga Studio 4.0 book file (extension: cst) displays the [Create page management folder] dialog box. Specifying a location for the management folder in the dialog box converts the Manga Studio 4.0 book file into a Manga Studio 5.0 management file (extension: cmc) and page files (extension: lip). For details on the page management in Manga Studio 5.0, see "Explanation: Page Management [EX]" .if they**

Memo

- **For files in TIFF (extension: tif), JPEG (extension: jpg), Adobe Photoshop Document (extension: psd) and Adobe Photoshop Big Document (extension: psb) format, images in CMYK format can also be opened.**
- **Images in CMYK format are converted into RGB format when opened. To display images in the CMYK color space, turn on [Preview] from [View] menu → [Color profile].**
- **To save an open image in CMYK format, specify [.tif(TIFF)], [.jpeg(JPEG)], [.psd(Photoshop Document)] or [.psb(Photoshop Big Document)] in [File] menu → [Export (Layered)]/[Export (Single Layer)] and [CMYK] for [Expression color]. For details on how to configure, see "[Export settings] Dialog Box" or "[Export settings] Dialog Box (For Photoshop Document and Photoshop Big Document)" .**
- **To open a page file in EX, specify the management file (cmc) or page file (extension: lip) in the [Open] dialog box. For details, see "Opening a Page File" .**

Regarding Import of IllustStudio/Manga Studio 4.0 Documents

Manga Studio 5.0 supports the following IllustStudio document and Manga Studio 4.0 page file layers. Some layers may be imported but not edited.

IllustStudio/Manga Studio 4.0 layer	Manga Studio 5.0 layer	Remarks
Raster layer (1 bit)	Raster layer (Monochrome (Black))	
Raster layer (2 bits)	Raster layer (Monochrome (Black and White))	
Raster layer (8 bits)	Raster layer (Gray (Only Black)	If [Tonization] or [Pseudo tone] is configured for [Color reduction method] in Manga Studio 4.0, the layer will be imported with [Tone] on the [Layer property] palette turned on.
Raster layer (32 bits)	Raster layer (color)	

IllustStudio/Manga Studio 4.0 layer	Manga Studio 5.0 layer	Remarks
Vector layer (2 bits)	Vector layer (Monochrome (Black and White))	Shape of the image may change when imported. To prevent shapes from changing, configure [File] on the [Preferences] dialog box to import the vector layers as raster layers.
Vector layer (32 bits)	Vector layer (color)	
Sketch layer	Raster layer	
Reference layer	Reference layer	
Text layer	Text layer	
Balloon layer (Ruler balloon)	Balloon layer (Including balloon and text)	In the cases below, the balloon is imported as a balloon layer and the text, as a text layer: ● The color of the balloon's line is other than black ● The color of the balloon's interior is other than white ● The balloon is inside a text layer
Balloon layer (Raster balloon)	● Image material layer (Balloon) ● Text layer (Text)	
Patterned tone layer	Image material layer	
[Normal] tone	Monochrome layer	[Tone] on the [Layer property] palette is turned on.
[Gradient] tone	Gradient layer	[Tone] on the [Layer property] palette is turned on.
[Background] tone	Image material layer	[Tone] on the [Layer property] palette is turned on.
Frame folder	Frame folder	In the cases below, a [Raster] layer will be added immediately above the [Frame folder], and the border drawn there. ● When [Rasterize vector] is enabled on the [Preferences] dialog box ● When the frame is double-lined Furthermore, when the border is outside the red line indicating the frame range, the [Frame folder] is duplicated to handle the frame range as one frame border.
Layer folder	Layer folder	
3D workspace folder	Layer folder	3D material cannot be edited.
3D preview layer	Raster layer	3D material cannot be edited.
Clipping folder	Layer folder + Clip at layer below	
Clip at layer below	Clip at layer below	
Filter layer (Brightness/Contrast)	Correction layer (Brightness/Contrast)	

IllustStudio/Manga Studio 4.0 layer	Manga Studio 5.0 layer	Remarks
Filter layer (Tone curve)	Correction layer (Tone curve)	
Filter layer (Level correction)	Correction layer (Level correction)	
Filter layer (Inverse)/ Inverse layer	Correction Layer (Reverse gradient)	
Filter layer (Mask (Whole area hidden))	Layer mask	
Filter layer (Mask (Whole area displayed))/Masking layer	Layer mask	
Filter layer (Gradient map)	Deleted	
Filter layer (Hue/Saturation/Luminosity)	Correction layer (Hue/Saturation/ Luminosity)	
Filter layer (Texture)	Image material layer + Texture combine	
Filter layer (Color balance)	Correction layer (Color balance)	
Sub ruler layer	Deleted	When there are drawings on the ruler, the ruler is converted into raster layer.
Ruler layer	Deleted	
Selection layer (1 bit)	Selection layer	
Selection layer (8 bits)	Selection layer	
Paper layer	Paper layer	
Guide layer	Deleted	
Grid layer	Deleted	
Print guide layer	Print guide	Not displayed on the [Layer] palette.
Border ruler layer	Raster layer (Gray)	

Important **Importing a Manga Studio 4.0 page file adds a [Paper] layer (White).**

Recent

Displays a list of recently used files. Allows you to select a file to open and edit.

Close

Selecting [File] menu → [Close] closes the file being edited.

Save

Selecting [File] menu → [Save] saves the file by overwriting the same file. The file name and save location are specified only when saving for the first time.

Files can be saved in Manga Studio 5.0 format (extension: lip), BMP, JPEG, PNG, TIFF, Targa, Adobe Photoshop Document (extension: psd) and Adobe Photoshop Big Document (extension: psb).

Save as

Selecting [File] menu → [Save as] saves the file with a different name to separate from the same file saved before.

Files can be saved in Manga Studio 5.0 format (extension: lip), BMP, JPEG, PNG, TIFF, Targa, Adobe Photoshop Document (extension: psd) and Adobe Photoshop Big Document (extension: psb).

Memo

Selecting [File] menu → [Export (Single Layer)] to save in BMP, JPEG, PNG, TIFF or Targa, allows you to configure whether or not to output the [Draft] layer, as well as the size settings and zoom in/out processing. For details, see "Export (Single Layer)" .

Export (Layered)

Allows you to save the data of the currently open canvas by directly specifying the saving format.

You can save files in Manga Studio 5.0 format (extension: lip), Manga Studio 5.0 (Optimized) format (extension: lip), Adobe Photoshop Document (extension: psd) and Adobe Photoshop Big Document (extension: psb).

For Adobe Photoshop Document (extension: psd) and Adobe Photoshop Big Document (extension: psb), you can configure expression color and ICC profile embedding. For details on how to configure on the dialog box, see "[Export settings] Dialog Box (For Photoshop Document and Photoshop Big Document)" .

Memo

The Manga Studio 5.0 (Optimized) format has the following characteristics:

- **Image quality does not degrade as a result of optimization.**
- **File size may become smaller when the number of layers is reduced during a task.**
- **Export may take long.**

[Export settings] Dialog Box (For Photoshop Document and Photoshop Big Document)

(1) Output image

You can configure whether or not to include [Draft] layer, [Crop mark], [Default border], [Text], [Story information], and [Folio] when exporting. The items that are turned on are exported. The items that are turned on are exported.

(2) Expression color

You can configure the expression color of the image to output. You can select from [Gray], [RGB color] and [CMYK color].

(3) Advanced color settings

Clicking the button opens the [Advanced color settings] dialog box, Allows you to configure the color of the print guide when exporting an image using the dialog box.

Export with display color	The [Crop mark/Basic frame] in [Preferences] dialog box → [Ruler/Frame/Unit] is configured for print guide color.
Export with cyan	Cyan is configured for print guide color.
Export with black	Black is configured for print guide color.

(4) Embed ICC profile

Turning on this item embeds the ICC profile when exporting the file.

Memo

- **On the [Preferences] dialog box, you can configure default values for color profile, rendering intent and the like for exporting in [RGB] or [CMYK]. For details on how to configure, see "File Menu" → "Preferences [Windows]" → "Color conversion" .**
- **In [View] menu → [Color profile] → [Preview settings], you can configure color profile, rendering intent and the like for exporting in [RGB] or [CMYK]. For details on how to configure, see "View Menu" → "Color Profile" → "Preview settings" .**

(5) OK

Commits the settings and closes the [Export settings] dialog box.

(6) Cancel

Cancels the settings and closes the [Export settings] dialog box.

Export (Single Layer)

Allows you to integrate all layers of the currently open canvas and save the data by directly specifying the saving format.

You can save files in BMP, JPEG, PNG, TIFF, Targa, Adobe Photoshop Document (extension: psd) and Adobe Photoshop Big Document (extension: psb).

- You can configure whether or not to output the [Draft] layer, as well as the size settings and zoom in/out processing.
- For TIFF, JPEG, Adobe Photoshop Document (extension: psd) and Adobe Photoshop Big Document (extension: psb), you can configure ICC profile embedding.

[Export settings] Dialog Box

(1) Preview rendering result on output

When turned on, the [Export preview] dialog box is displayed during output for you to check the output content.

Memo

For [Export preview] dialog box, see "[Export preview] Dialog Box" .

(2) Quality

For JPEG, you can configure the quality in which to save the image. The larger the value, the higher will be the image quality. This item does not display for saving formats other than JPEG.

(3) Output image

You can configure whether or not to include [Draft] layer, [Crop mark], [Default border], [Text], [Story information], and [Folio] when exporting. The items that are turned on are exported. The items that are turned on are exported.

(4) Expression color

You can configure the expression color of the image to output. You can select from [Auto detected appropriate color depth], [Duotone], [Gray] and [RGB color].

For TIFF (extension: tif), JPEG (extension: jpg), Adobe Photoshop Document (extension: psd) and Adobe Photoshop Big Document (extension: psb), you can configure ICC profile embedding.

Clicking [Advanced color settings] opens the [Advanced color settings] dialog box, where you will be able to configure the print guide color and the number of tone lines. For details on the [Advanced color settings] dialog box, see "[Advanced color settings] Dialog Box" .

Important

- **[Embed ICC profile] is not displayed when saving in BMP, PNG or Targa.**
- **[CMYK] is available when exporting an image in TIFF (extension: tif), JPEG (extension: jpg), Adobe Photoshop Document (extension: psd) or Adobe Photoshop Big Document (extension: psb) format.**

Memo

- **On the [Preferences] dialog box, you can configure default values for color profile, rendering intent and the like for exporting in [RGB] or [CMYK]. For details on how to configure, see "File Menu" → "Preferences [Windows]" → "Color conversion" .**
- **In [View] menu → [Color profile] → [Preview settings], you can configure color profile, rendering intent and the like for exporting in [RGB] or [CMYK]. For details on how to configure, see "View Menu" → "Color Profile" → "Preview settings" .**
- **[Auto detected appropriate color depth] is determined based on the expression color of each layer.**

(5) Output size

You can specify the size of the file to output.

Scale ratio from original data	Specify the size of the image to export as a ratio of the original data.
Specify output size	Specify the size of the image to export with [Width] and [Height]. You can select the unit from [cm], [mm], [in], [px] and [pt].

(6) Process when scaling

Specify the process for enlarging or reducing the image for exporting. You can select from [For illustration] and [For comic].

When you select [For comic], you can configure the image quality if you export specifying [Rasterize]. You can select from [Fast] and [Quality]. When [For illustration] is selected, always [Quality] is specified for exporting.

Memo **If quality is desired when outputting reduced, configuring [Quality] for [Rasterize] is recommended.**

(7) OK

Commits the settings and opens the [Export preview] dialog box. For details on the [Export preview] dialog box, see "[Export preview] Dialog Box" .

(8) Cancel

Cancels the settings and closes the [Export settings] dialog box.

[Export preview] Dialog Box

Clicking [OK] on the [Export settings] dialog box displays the [Export preview] dialog box. The image when the file is exported is previewed. When exporting in JPEG format, you can configure [Quality] for the image by checking the preview.

Important **The [Export preview] dialog box is not displayed if [Preview rendering result on output] on the [Export settings] dialog box is turned off.**

(1) Image preview

Previews the image when the file is exported. By dragging the [Image preview], you can adjust the display position of the previewed image.

(2) Scale up/down slider

By dragging the slider, you can adjust the scale of [Image preview]. Dragging to the right scales up the image while dragging to the left scales down the image. Clicking the numeric value allows you to directly input the scale.

(3) Zoom out

Click to scale down the image previewed in [Image preview].

(4) Zoom in

Click to scale up the image previewed in [Image preview].

(5) Pixel size

Click to display the image previewed in [Image preview] in actual pixels (100%).

(6) Fit to Navigator

Click to display the previewed image fit to the [Image preview] window size. The size of the previewed image changes in conjunction with the dialog box size when the latter is changed.

(7) Fit to Screen

Click to display the previewed image fit to the [Image preview] window size. The size of the previewed image does not change in conjunction with the dialog box size when the latter is changed.

(8) Quality

For JPEG, you can configure the quality in which you want to save the image. The larger the value, the higher will be the image quality. This item cannot be configured for saving formats other than JPEG.

The [Quality] setting is reflected in the [Image preview].

(9) File size

For JPEG, the size of the file to export is displayed. The size is not displayed for saving formats other than JPEG.

(10) OK

Closes the dialog box and exports the file as configured.

(11) Cancel

Cancels the file export and closes the dialog box.

[Advanced color settings] Dialog Box

Clicking [Advanced color settings] on the [Export settings] dialog box opens the [Advanced color settings] dialog box, where you will be able to configure the print guide color and the number of tone lines applicable when exporting an image.

(1) Crop mark/Default border

Allows you to configure the color of the print guide when exporting an image.

Export with display color	The [Crop mark/Basic frame color] in [Preferences] dialog box → [Ruler/Frame/Unit] is configured for print guide color.
Export with cyan	Cyan is configured for print guide color.
Export with black	Black is configured for print guide color.

(2) Number of tone lines

Allows you to configure the number of tone lines when exporting an image.

Depend on export scale	The number of tone lines varies in accordance with the output size specified in the [Export settings] dialog box.
Follow layer settings	The number of tone lines in each layer of the original image is output as-is.

(3) Enable tone effect for layer

When turned on, the content configured in [Effect] for [Tone] on the [Layer property] palette is reflected when exporting an image.

Import

You can import image files, pattern image files, and so on.

Image

To import an image file, create an image layer above the currently edited layer.

Memo

Importing an image after creating a selection area allows you to import the image to the selected area.

1 Select the command

Select [File] menu → [Import] → [Image].

2 Select the image file

The [Open] dialog box opens. Select the image to import.

3 The image is imported

An image layer is created above the currently edited layer, and the image file, imported.

Important

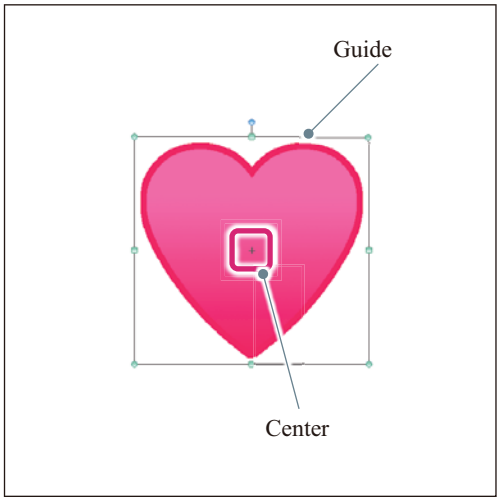
To draw on a layer with an imported image, the layer must be rasterized. For details, see "Rasterize" .

4 Adjust the image orientation, size and the like

A guide is displayed in the center of the canvas. Using the handles and control point of the guide, adjust the image orientation, size and the like.

Memo

You can adjust the image afterwards:
(1) On the [Layer] palette, select the layer with the imported image.
(2) On the [Tool] palette, select the [Operation] tool.
(3) On the [Sub tool] palette, select [Object].

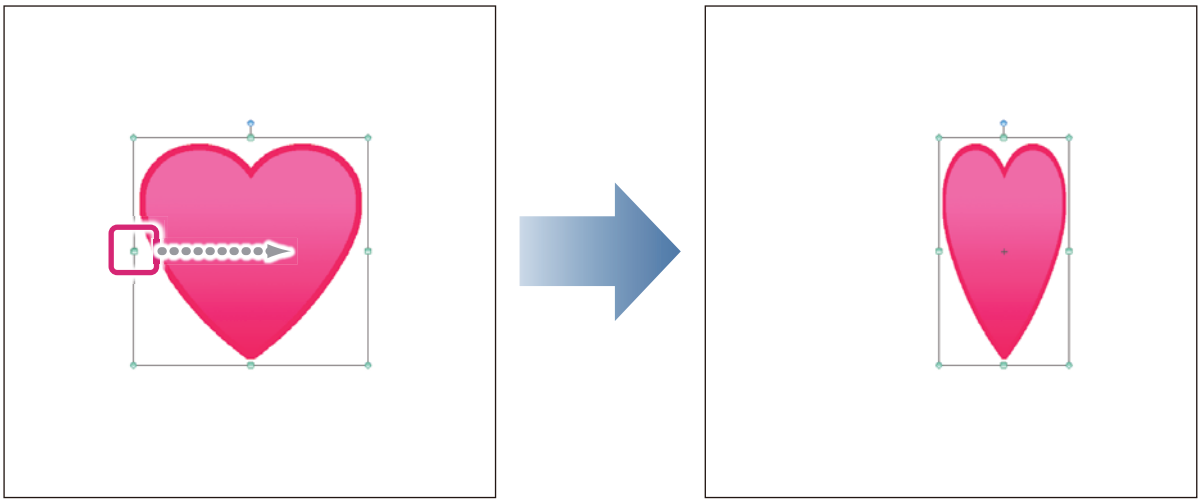


Memo

You can lay out an imported image repeatedly. For details, see the description for "Transform settings" in "Manga Studio 5.0 Tool Setting Guide".

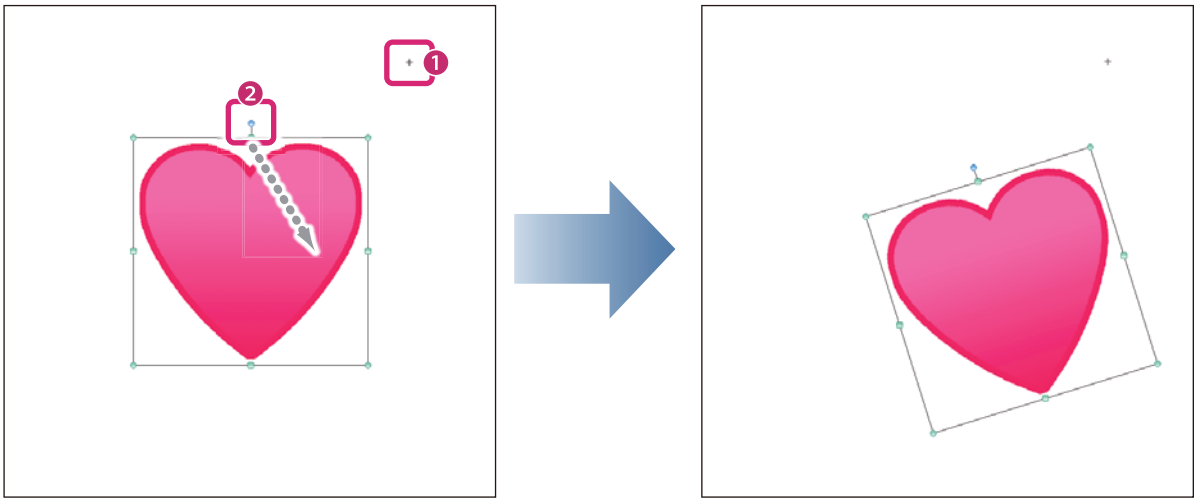
Transforming an Image

Dragging a handle allows you to transform the image.



Rotating an Image

Dragging the control point allows you to rotate the image.

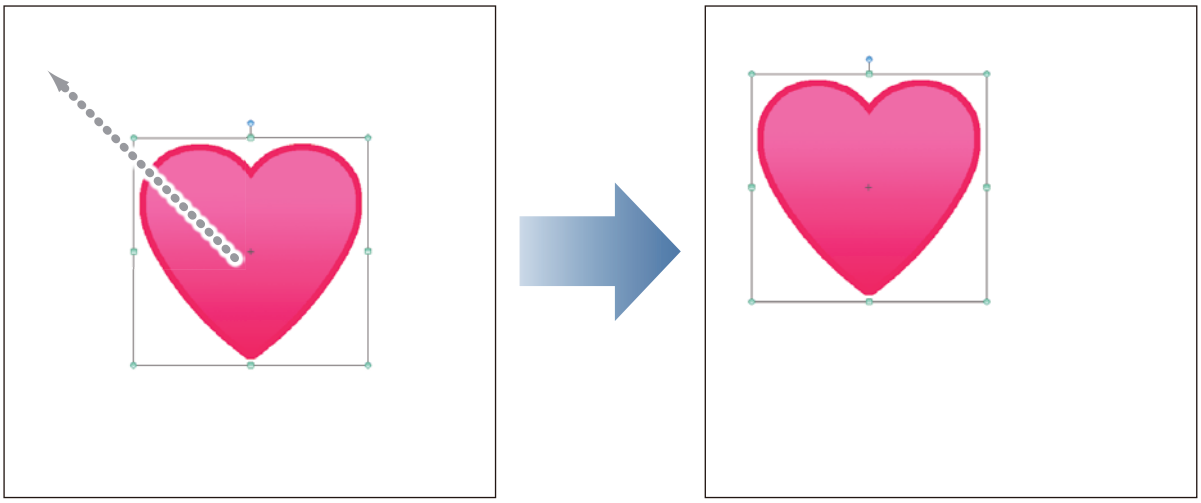


(1) Move its center (+).

(2) Drag its control point. The image will rotate around its center.

Moving an Image

Dragging the drawing area or the guide allows you to move the image.



Pattern from image

Create an image layer above the currently edited layer to import the image file. The imported image is tiled.

Memo **Importing a pattern image after creating a selection allows you to import the pattern image to the selected area.**

1 Select the command

Select [File] menu → [Import] → [Pattern from image].

2 Select the image file

The [Open] dialog box opens. Select the image to import.

3 Import the image

A pattern image layer is created above the currently edited layer and the image file, imported. The imported image is tiled.

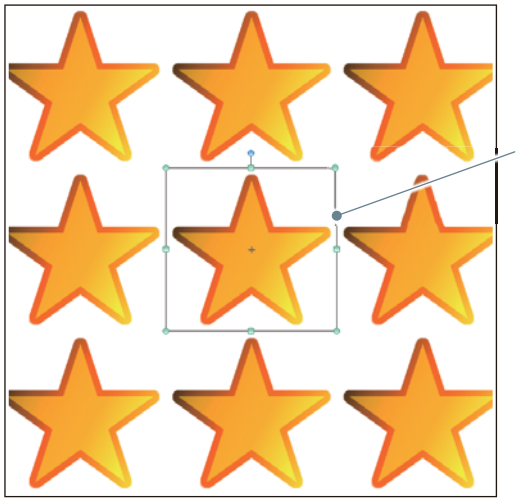
Important **To draw on a layer with an imported pattern image, the layer must be rasterized. For details on rasterization, see "Rasterize" .**

4 Adjust the image orientation, size and the like

A guide is displayed in the center of the canvas. Using the handles and control point of the guide, adjust the image orientation, size and the like.

Memo

You can adjust the image afterwards: To display the guide afterwards, follow the procedure below.
(1) On the [Layer] palette, select the layer with the pattern image.
(2) On the [Tool] palette, select the [Operation] tool.
(3) On the [Sub tool] palette, select [Object].

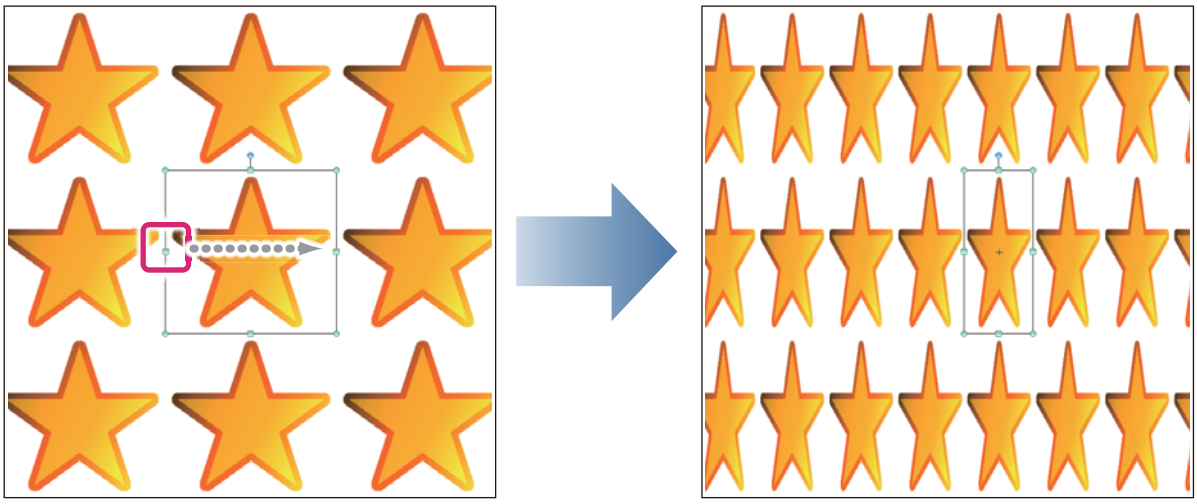


Memo

You can configure how to tile an image on the [Tool property] or [Sub tool detail] palette. For details, see the paragraphs on "Transform settings" in "Manga Studio 5.0 Tool Setting Guide".

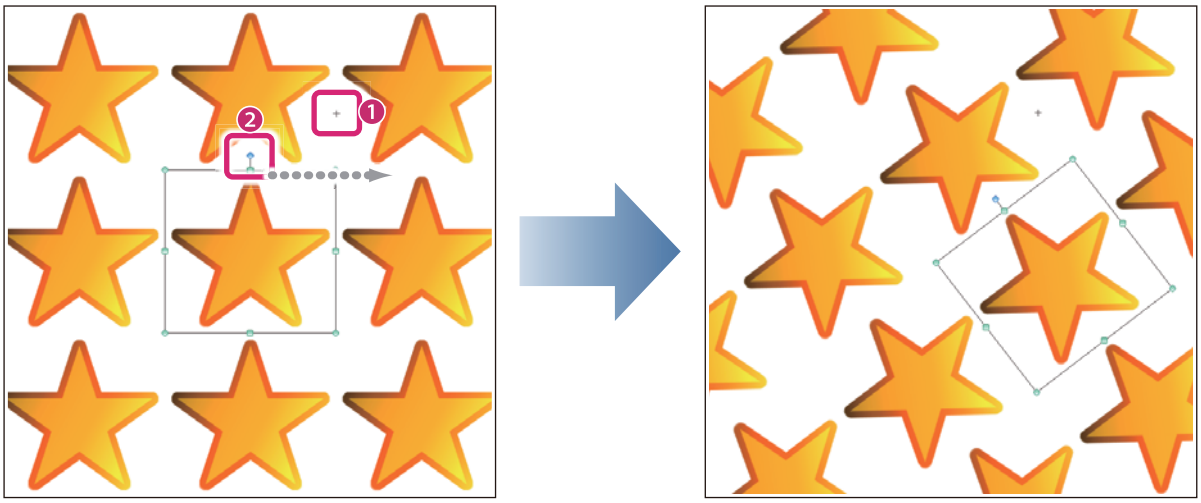
Transforming a Pattern Image

Dragging a handle allows you to transform the pattern image.



Rotating a Pattern Image

Dragging the control point allows you to rotate the pattern image.

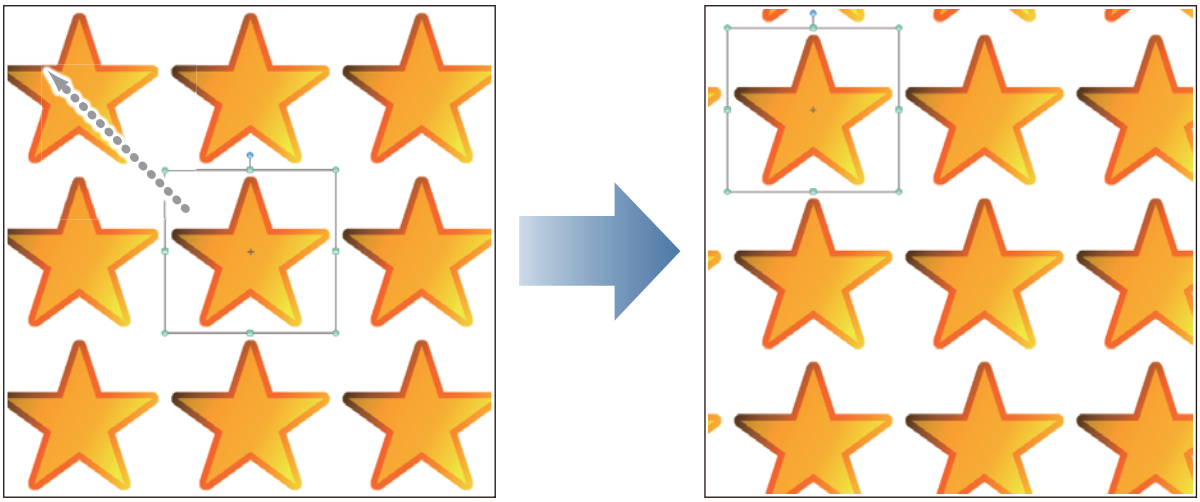


(1) Move its center (+).

(2) Drag its control point. The pattern image will rotate around its center.

Moving a Pattern Image

Dragging the drawing area or the guide allows you to move the pattern image.



Scan

Import images as layers using a commercial scanner.

Memo

The scanner driver to use is configured in [File] menu → [Import] → [Select scan device]. For details, see "Select scan device" .

1 Select the command

Select [File] menu → [Import] → [Scan].

2 Scan

The scanner driver is displayed. Configure the driver and scan.

Memo

The procedure of scanning varies according to the scanner in use. See the instruction manual of the scanner as well.

3 Import is completed

An image layer has been created above the currently edited layer, and the image file, imported.

Important

To draw on a layer with an imported image, the layer must be rasterized. For details, see "Rasterize" .

Select scan device

Select the scanner, etc. to be used for scanning.

1 Connect the scanner

Connect a commercial scanner.

Memo

- **For the detailed connection procedure such as the installation of the scanner driver, see the instruction manual of the scanner.**
- **In Windows, only scanners compatible with TWAIN can be used.**

2 Select the command

Select [File] menu → [Import] → [Select scan device]. The [Select source] dialog box displays.

3 Select the scanner

Select the connected scanner in the [Select source] dialog box.

(1) Select the connected scanner.

(2) Click [Select].

Memo

The WIA scanner driver cannot be used.

4 The selection of the scan device is completed

The selected device has been set as the scan device.

Create New From Clipboard

Create a new canvas whose size is suitable for the image in the clipboard, and import the image.

Memo **[Create New From Clipboard] is available independently of whether or not the canvas is opened.**

Print settings

Configure the detailed print settings as a preparation for printing.

[Print settings] Dialog Box

(1) Preview rendering result on output

When turned on, the [Print preview] dialog box is displayed for you to check the content to print.

Important **In EX, the [Print preview] dialog box is not displayed when printing more than one page.**

Memo **For [Print preview] dialog box, see "[Print preview] Dialog Box" .**

(2) Print settings

Configure the size and orientation for printing.

Same as detail	The size for printing is the actual size.
Scale up and down according to paper	The size for printing is adjusted to fit the paper size.
Pixel size	The size for printing is adjusted so that the relationship between the image pixel and screen pixel is 1 to 1.
Dual page [EX]	The page layout for printing is configured to dual page. ● Two pages are printed on one sheet of paper. ● The margin on the front side becomes the outer side because the binding margin will be on the outer side of the paper.
Spread [EX]	The page layout for printing is configured to 2-page spread. ● Two pages are printed on one sheet of paper. ● The margin on the fore edge side becomes the inner side because the binding margin will be on the inner side of the paper.

(3) Rotate paper 90 degrees

Prints the original in landscape orientation.

(4) Output image

You can configure whether or not to include [Draft] layer, [Crop mark], [Default border], [Text], [Story information], and [Folio] when printing. The items that are turned on are printed.

With EX, you can specify the image area to print in [Output range]. Available options are: [Full page], [To offset of crop mark] and [To inside of crop mark].

(5) Expression color

You can configure the expression color for printing. You can select from [Auto detected appropriate color depth], [Duotone], [Gray] and [RGB color].

Memo

For [Auto detected appropriate color depth], the expression color of each layer is determined based on the original color depth and output.

(6) Advanced color settings

Clicking the button opens the [Advanced color settings] dialog box, where you will be able to configure the print guide color and the number of tone lines. For details on the [Advanced color settings] dialog box, see "[Advanced color settings] Dialog Box" .

(7) Process when scaling

Specify the process for enlarging or reducing the image for printing. You can select from [For illustration] and [For comic]. When you select [For comic], you can configure the image quality for printing if you print in [Rasterize] mode.

You can select from [Fast] and [Quality]. When you select [For illustration], [Quality] is always specified for printing.

Memo

If quality is desired when printing reduced, configuring [Quality] for [Rasterize] is recommended.

(8) Execute print

Saves the above settings to close the dialog box and opens the dialog box for printing.

Memo

- **The dialog box for printing may vary depending on your OS and printer.**
- **In Mac OS X, executing print from the [Print] dialog box displays the [Print resolution] dialog box. Confirming the content of [Print resolution] and clicking [OK] starts the printing. The [Print resolution] dialog box is configured by referencing the resolution of the printer connected to the computer. However, its settings can be changed.**

[Advanced color settings] Dialog Box

Clicking [Advanced color settings] on the [Print settings] dialog box opens the [Advanced color settings] dialog box, where you will be able to configure the print guide color and the number of tone lines applicable when printing an image.

(1) Crop mark/Default border

Allows you to configure the print guide color when printing an image.

Export with display color	The [Crop mark/Basic frame color] (the color displayed in the canvas) in [Preferences] dialog box → [Ruler/Frame/Unit] is configured for print guide color.
Export with cyan	Cyan is configured for print guide color.
Export with black	Black is configured for print guide color.

(2) Number of tone lines

You can configure the number of tone lines for printing.

Depend on export scale	The number of tone lines varies in accordance with the output size specified in the [Print settings] dialog box.
Follow layer settings	The number of tone lines in each layer of the original image is output as-is.

(3) Enable tone effect for layer

When turned on, the content configured in [Effect] for [Tone] on the [Layer property] palette is reflected when printing an image.

Print

Print the work.

1 Select the command

Selecting [File] menu → [Print] displays the dialog box for printing.

2 Configure the dialog box.

Configure the dialog box for printing. The following dialog box displays in the case of Windows.

(1) Select a printer.

(2) Configure the number of copies to print.

(3) Clicking the [Print] button displays the [Print preview] dialog box.

Memo

- **The dialog box for printing may vary depending on your OS and printer.**
- **In Mac OS X, executing print from the [Print] dialog box displays the [Print resolution] dialog box. Confirming the content of [Print resolution] and clicking [OK] starts the printing. The [Print resolution] dialog box is configured by referencing the resolution of the printer connected to the computer. However, its settings can be changed.**
- **With EX, you can specify the page area to print. [EX]**

3 Print

Check the preview on the [Print preview] dialog box. Click [OK] to start printing.

Important

The [Print preview] dialog box is not displayed if [Preview rendering result on output] on the [Print settings] dialog box is turned off. Printing is executed from the dialog box for printing.

[Print preview] Dialog Box

Clicking the [Print] button on the [Print] dialog box displays the [Print preview] dialog box.

Important

The [Print preview] dialog box is not displayed if [Preview rendering result on output] on the [Print settings] dialog box is turned off.

(1) Image preview

Previews the image when printed. By dragging the [Image preview], you can adjust the display position of the previewed image.

(2) Scale up/down slider

By dragging the slider, you can adjust the scale of [Image preview]. Dragging to the right scales up the image while dragging to the left scales down the image. Clicking the numeric value allows you to directly input the scale.

(3) Zoom out

Click to scale down the image previewed in [Image preview].

(4) Zoom in

Click to scale up the image previewed in [Image preview].

(5) Pixel size

Click to display the image previewed in [Image preview] in actual pixels (100%).

(6) Fit to Navigator

Click to display the previewed image fit to the [Image preview] window size. The size of the previewed image changes in conjunction with the dialog box size when the latter is changed.

(7) Fit to Screen

Click to display the previewed image fit to the current window size. The size of the previewed image does not change in conjunction with the dialog box size when the latter is changed.

(8) OK

Closes the dialog box and prints the work as configured.

(9) Cancel

Cancels the settings and closes the dialog box.

Preferences [Windows]

Clicking [File] menu → [Preferences] displays the [Preferences] dialog box.

Configure Manga Studio 5.0 preferences such as Layer, Tool, Tablet, Performance and the like.

Tool

Configures settings related to tool operation.

Switch tool temporarily (tool shift)

(1) Switch tool temporarily by pressing and holding shortcut key

When turned on, holding the shortcut key assigned to a tool on the [Tool] palette switches the tool for the time the key is held down.

(2) Response time before switching tool temporarily

Specify the time in milliseconds to switch the tool by tool shift from the time the shortcut key is held down.

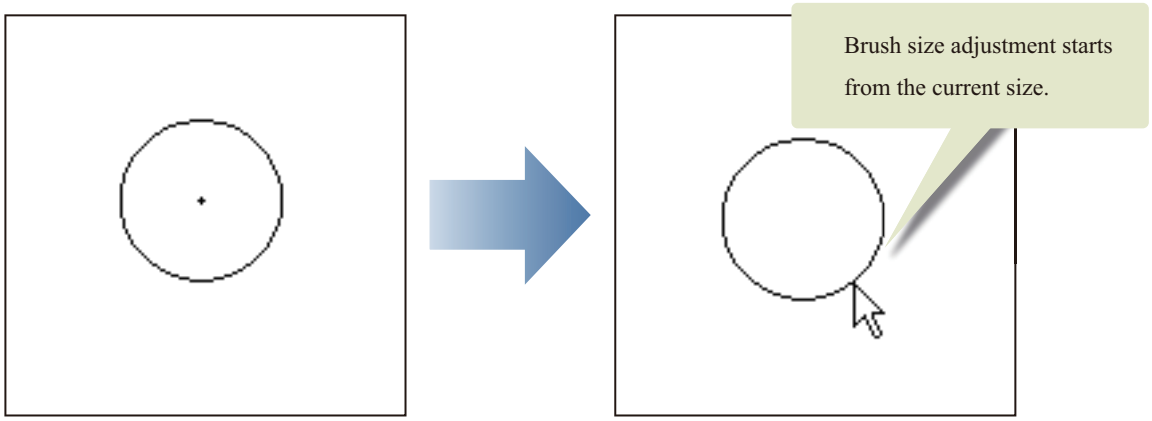
Option

(3) Auto scroll at edge of canvas while dragging

When turned on, if the cursor moves outside the canvas while being dragged to specify a selection or the like, the canvas is scrolled to follow the cursor.

(4) Start from current size when changing brush size by dragging on canvas

When the brush size is adjusted by dragging the mouse while holding the [Ctrl]+[Alt] keys down, the brush size adjustment starts from the current size.



(5) Show preview when creating line by keeping pressing modifier key (Shift)

Previews the line when a straight line is drawn by holding the [Shift] key and clicking with a drawing tool.

(6) Make canvas fast view mode while dragging viewing tools

Puts the canvas in fast view mode when dragged with a viewing tools such as the [Magnifier] tool and [Move] tool. The required processing capacity when using a viewing tool may be reduced.

Tablet [Windows]

Configures settings related to tablet operation.

Tablet service to use

Configures settings related to the type of tablet to use.

(1) Wintab

Select when using a normal tablet.

(2) TabletPC

Select when using a tabletPC.

Coordinates mode

(3) Use Mouse mode by Tablet driver setting

Turn on this item when mouse mode is enabled by the tablet driver settings.

Tablet control area

Configures the [Display area] and [Tablet control area] of the tablet from Manga Studio 5.0.

(4) Set tablet control area with application

When turned on, the [Display area] and [Tablet control area] of the tablet are configured from Manga Studio 5.0.

Important **Configure this function when using a tablet without "Control area on monitor" and "Control area on tablet" settings. If the driver of your tablet has these settings, configure them on the driver.**

Control area on monitor

Configures the monitor area in which the cursor can move.

Control whole screen	The cursor can move around the entire area of the connected monitor. This also applies to multi-monitors, independently of how they are arranged.
Control specified monitor	This setting is available only in a multi-monitor environment. Turning on this item displays the monitor number on the right side. You can change the value with a pop up slider which will display as many values as the number of connected monitors. The area in which the cursor can move is the area around the upper left corner of the specified monitor.

Control area on tablet

Configures the tablet area in which operation is possible.

Control while keeping aspect ratio of monitor	The control area is configured so that the monitor is included in the tablet area.
Control with whole tablet	The aspect ratio is ignored and the whole tablet is configured as control area.

Tablet [Mac OS X]

Configures settings related to tablet operation.

(1) Processing priority

Allows you to configure the processing priority when using the tablet. The priority can be set between 1 and 6, and the lower the figure, the higher the priority of tablet processing becomes.

Memo

- **Drawing may not be performed properly if the tablet is used in Manga Studio 5.0 while another application is running. This problem might be solved by changing the value in [Processing priority].**
- **The operation of Manga Studio 5.0 might be slowed if the value in [Processing priority] is reduced.**

(2) Do not omit drawing update

Switches whether to prioritize drawing update processing or tablet input processing when input processing has become very slow because the load of drawing processing is too large.

When turned off, input processing is prioritized over the drawing update processing. This might improve the speed of drawing processing when drawing is slow for the stroke of the tablet.

Important

- **The setting of [Do not omit drawing update] is enabled when Manga Studio 5.0 is restarted.**
- **Updating or reinstalling Manga Studio 5.0 restores the initial setting status of [Do not omit drawing update].**

Interface

Configures settings related to the IME control, colors for the main window, and screen/operations optimized for touch operations in Windows8.

IME control

Configures settings related to IME toggling.

(1) Automatically activate IME when editing text layer

IME is automatically turned on when letters are input in a [Text] layer. Depending on the IME settings, Japanese input becomes possible when you start text editing, even without toggling to Japanese input.

(2) Automatically switch IME when typing text into panel

If turned on, the IME input mode changes automatically when inputting letters in a palette. For example, the mode toggles to hiragana input when the mouse cursor is moved to the field to input the layer name on the [Layer] palette, or to alphanumerical input when the mouse cursor is moved to a numeric field on the [Tool property] palette to input a value.

Color

Allows you to change the colors in which the Manga Studio 5.0 main window is displayed.

(3) Theme of color combination

Configures the color theme. You can select from [Light color] and [Dark color].

(4) Adjust density

A slider allows you to configure the density of the colors.

Touch operation settings [Windows]

Switches the screen/operations of Manga Studio 5.0 to those optimized for the touch operations in Windows 8.

Important **The contents configured in [Touch operation settings] are enabled when Manga Studio 5.0 is restarted. For operations etc. when using a slate device, see "Explanation: Touch Operations in Windows8" .**

(5) Adjust an interface to suit touch operations

Turning this on optimizes the sizes of the buttons and characters, operations, etc. of Manga Studio 5.0 for the touch operations in Windows 8.

(6) Interface scaling

Turning on [Adjust an interface to suit touch operations] allows you to configure the sizes of buttons and characters.
You can select from [Large], [Default], and [Small].

Memo **Depending on the settings of Windows, there might be some items which are not displayed by the [Large], [Default], and [Small] buttons.**

Performance

Configures settings related to performance such as memory and undo history.

Memory

(1) Destination to create virtual memory

Specify the disk drive where to create the virtual memory.

Important

Be sure the folder specified as the destination where the virtual memory will be created is in a disk drive with enough capacity. If the disk drive where the virtual memory will be placed does not have enough capacity, the program may become unstable.

(2) Allocate to application

Specify the percentage of memory to allocate to the application. Changes are reflected after the application is restarted.

Specifying a percentage displays the size of memory allocated to the application in the [Memory size to use] item below.

Important

Be sure the specified [Allocate to application] is not extremely small. However, if [Allocate to application] is too large, the OS operation may become unstable.

Undo

(3) Undo count

Specify the maximum number of operations you can cancel with [Edit] menu → [Undo].

(4) Delay before recognizing new object to undo after drawing

Specify the number of seconds without any operation necessary to recognize an operation as another when using the same tool consecutively.

For example, specify the number of seconds necessary to recognize an operation as another when drawing with fast strokes using a drawing tool.

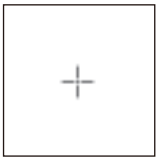
Cursor

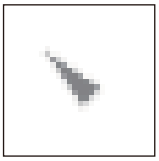
Specifies the shape of the cursor when used. You can also configure an additional view for small brush size, or the display position for reversed cursor (brush size, sight, single pixel dot).

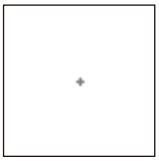
(1) Shape of cursor

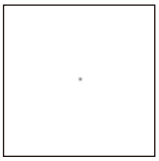
You can specify the shape of the cursor when used.

Tool specific

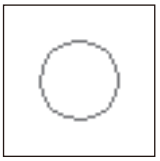

Cross


Triangle (Orientation adjustable)

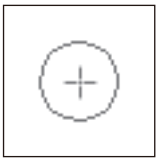

Dot

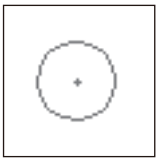

Single pixel dot

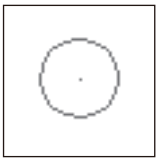
Sight


Brush-size

Brush-size and tool specific


Brush-size and cross


Brush-size and dot


Brush-size and Single pixel dot

Memo **The cursor shape that can be specified varies depending on the tool.**

Brush-type cursor

The following cursor shapes are available:

- Brush tool
- Air brush tool
- Decoration tool
- Eraser tool
- Blend tool
- Correct line tool
- Selection pen
- Clear selection
- Paint unfilled area
- Ruler pen

Pen-type cursor

The following cursor shapes are available:

- Pen tool
- Pencil tool

Memo **The [Pastel] tool group of the [Pencil] tool classifies as brush-type cursor.**

Eraser-type cursor

The following cursor shapes are available:

- Eraser tool

Figure-type cursor

The following cursor shapes are available:

- Figure tool
- Text tool (Balloon)
- Layer selection
- Enclose and fill
- Gradation tool

Fill-type cursor

The following cursor shapes are available:

- Auto select Tool
- Fill tool

View-type cursor

The following cursor shapes are available:

- Magnifier tool
- Move tool
- Eye dropper tool

Line-correction-type cursor

The following cursor shapes are available:

- Correct line tool

(2) Additional display when brush-size cursor is small

The line displayed around the cursor when using a small brush-size cursor can be changed to dots, or hidden. Select from [None], [Dot] and [Line] on the list. This setting is independent of the tool type and common to all tools.

(3) Display position of reversed cursor (Brush-size/Sight/Single pixel dot)

You can configure the display position of the cursor when drawing with [Shape of cursor] configured to [Brush size], [Sight] or [Single pixel dot].

Memo **Changing this setting may improve the drawing speed when it is slow.**

No delay	The mouse center is in the mouse position.
Delay for stabilization	The mouse center is in the mouse position corrected by the [Stabilizer]. The cursor follows the mouse with a short delay.

Ruler/Frame/Unit

Allows you to configure default values for the ruler, grid, crop mark color, opacity, default space between frame borders for the [Divide frame border] and [Divide frame folder] sub tools, unit to be used by the tools, and so on.

Ruler/Grid/Crop mark

Allows you to configure settings such as color, opacity for the ruler, grid and crop mark.

(1) Line color

You can configure color for the following lines.

- Color of ruler to snap
- Color of ruler not to snap
- Color of grid line
- Color of grid dividing line
- Color of Crop mark/Basic frame

Clicking the color icon next to each item displays the dialog box for selecting a color.

(2) Opacity of Ruler/Grid/Crop mark

Allows you to configure opacity for the ruler, grid and crop mark.

(3) Decide direction again if coming back to start point while snapping perspective ruler

When turned on, you can change the drawing direction by dragging the drawing tool to the starting point while drawing snapped to the perspective ruler.

Frame border

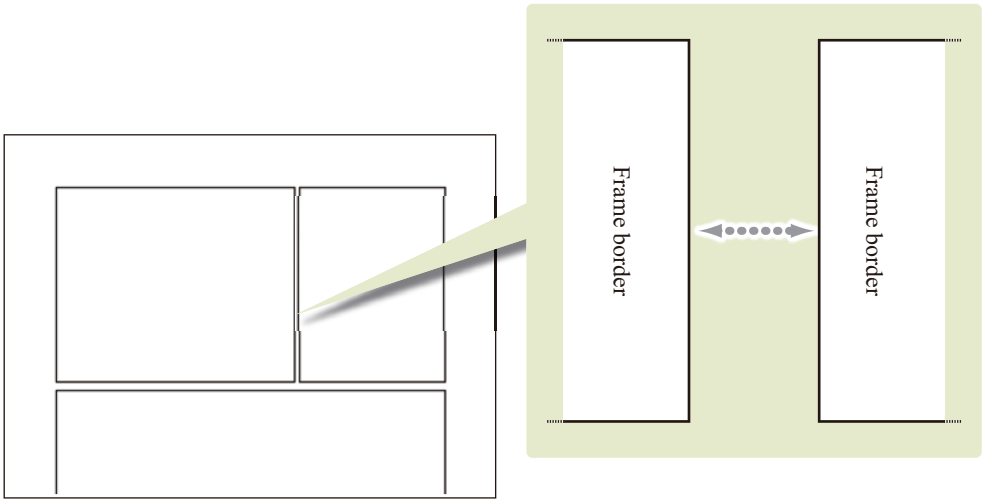
Configures the default value of the space between frame borders when using the [Divide frame border] and [Divide frame folder] sub tools.

Memo

[Frame border] settings are also used when the frame border is edited with the [Object] tool. If [Snap to another frame border] is turned on on the [Sub tool detail] palette when you are editing a frame border, moving the control point or frame border side snaps your tool to another point of the frame border side or its extension in accordance with the [Frame border] value.

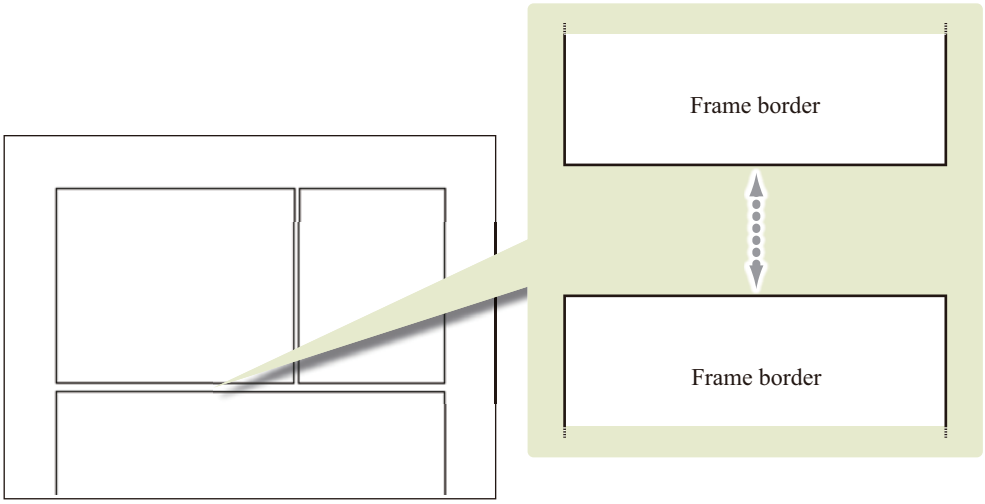
(4) Horizontal space

Configures the space between frame borders when a frame border is divided vertically.



(5) Vertical space

Specifies the space between frame borders when a frame border is divided horizontally.



Unit

Allows you to configure the unit of length to use in Manga Studio 5.0.

(6) Unit of lenghth

Allows you to configure the unit of length to use in Manga Studio 5.0. You can select from [px] and [mm].

(7) Text unit

Allows you to select the unit for the letter size to input with the [Text] tool from [Q] (Q) and [pt] (points).

Canvas

Allows you to configure settings such as the display quality of the canvas, as well as settings related to the scale and angle for displaying the canvas.

View

Configures the the display quality of the canvas.

(1) Quality

Select the display quality for the canvas from [Default] and [High quality].

Default	The image may become coarse when the canvas is rotated or depending on the scale setting. However, you will be able to perform operations comfortably as image processing does not require much processing capacity.
High quality	The image is always displayed in high quality. Operations may become slow when the canvas is rotated or depending on the scale setting.

Memo

When canvas operations become slow, turning on [Make canvas fast view mode while dragging viewing tools] in the [Tool] category of the [Preferences] dialog box may improve the operating conditions. For details, see "Option" .

(2) Transparent

Configure the color of transparent areas. Specify the color of the checkered pattern with [Color 1] and [Color 2].

Clicking the color indicator displays the dialog box for you to select a color for the checkered pattern.

Memo

When Hide is selected for [Show/Hide layer] of the [Paper] layer, the transparent area is displayed in checkered pattern.

Scale

Configures settings related to the display scale of the canvas.

(3) Scale list

The list of scales for performing [Zoom in] or [Zoom out] on the canvas with the [Navigator] palette, [View] menu, and so on.

(4) [Scale] input box

Allows you to change the display scale selected in the [Scale list] or input a new scale.

(5) Add

Adds the display scale input in the [Scale] input box to the [Scale list].

(6) Delete

Deletes the display scale selected in the [Scale list].

(7) Change

Changes the display scale selected in the [Scale list] to the value specified in the [Scale] input box.

(8) Revert

Restores the display scales in the [Scale list] to their initial values.

Angle

Configures settings related to the display angle of the canvas.

(9) Step

Specify the angle by which the canvas will rotate when [Rotate left] or [Rotate right] is performed from the [Navigator] palette, [View] menu → [Rotate/Invert] and the like.

File

Configures settings related to file import.

Import IllustStudio document (xpg)

Configures settings related to the import of IllustStudio documents (extension: xpg).

(1) Combine all layers

Imports by integrating all layers.

(2) Anti-aliasing vector

Enables anti-aliasing for [Vector] layers.

(3) Rasterize vector

Imports [Vector] layers by converting into [Raster] layers.

Important

When an IllustStudio document including [Vector] layers is imported to Manga Studio 5.0, the content drawn on the [Vector] layers may not be imported correctly. To import the drawn content correctly, convert them into [Raster] layers.

Import Manga Studio 4 page file (cpg)

Configures settings related to the import of Manga Studio 4.0 page files (extension: cpg).

(4) Combine all layers

Imports by integrating all layers.

Important

In Mac OS X version, [Text] layers are not integrated even if [Combine all layers] is turned on.

(5) Anti-aliasing vector

Enables anti-aliasing for [Vector] layers.

(6) Rasterize vector

Imports [Vector] layers by converting into [Raster] layers.

Important

When a Manga Studio 4.0 document including [Vector] layers is imported to Manga Studio 5.0, the content drawn on the [Vector] layers may not be imported correctly. To import the drawn content correctly, convert them into [Raster] layers.

Text

(7) Render text like IllustStudio and Manga Studio 4

The text display function can be changed to keep the compatibility between [Text] layers when an IllustStudio document (xpg) or Manga Studio 4.0 page file (cpg) is imported.

Memo **Turning on [Render text like IllustStudio and Manga Studio 4] is recommended when importing an IllustStudio document (xpg) or Manga Studio 4.0 page file (cpg) including text.**

Word space, outline and italic settings

When turned on, the items [Word space] and [Outline] are added. [Italic] is added to [Style].

Line space specification

Changes the scope of application of [Line space].

When ON	Allows you to configure [Line space] for each line.
When OFF	The [Line space] setting applies to the entire text object.

Page Management [EX] *

(8) Auto save when switching page

When turned on, switching the page automatically saves and closes the page file you were editing.

(9) Always open with new tab when opening page with double-click

Allows you to configure how to open a page file when opening it by double clicking its thumbnail on the [Page manager] window.

- When turned on, the specified page file opens in a new tab.
- When turned off, the specified page file opens after the tab of the page file you were editing closes.

Color conversion

Allows you to configure default values for color profile, rendering intent and used library for exporting in [RGB] and [CMYK].

Memo **Values of items in [Color conversion settings] are used as default values for RGB ⇔ CMYK conversion when displaying or exporting images.**

Color conversion settings

(1) RGB profile

Specify the RGB color profile.

(2) CMYK profile

Specify the CMYK color profile.

(3) Rendering intent

Configure how to process the color conversion between color spaces with the color management system.

Perceptual	Preserves the visual relationship between colors so that colors are perceived natural even when color values are changed.
Saturation	Compares the maximum highlight in the source color space with the maximum highlight in the destination color space, and shifts the difference.
Relative colormetric	Tries to reproduce vivid colors, even at the expense of color accuracy.
Absolute colormetric	Keeps unchanged the colors that fall inside the destination gamut.

(4) Library to use [Windows]

Select the library to use from [Icclibrary] and [MicrosoftICM].

Important **[Library to use] is not available for Mac OS X.**

Shortcut settings [Windows]

Allows you to configure a shortcut for some of the main menu items, tool property items and brush sizes, as well as tools and sub tools.

Selecting [File] menu → [Shortcut settings] opens the [Shortcut settings] dialog box.

On the [Shortcut settings] dialog box, you can edit, add or delete the shortcuts of menu items and the like.

[Shortcut settings] dialog box

(1) Setting area

Select the category of the item(s) to which you want to assign a shortcut.

Main menu	Switches the [Shortcut list] to main menu items.
Option	Switches the [Shortcut list] to optional items.
Tool	Switches the [Shortcut list] to [Tool] and [Sub tool] items.
Auto action	Switches the [Shortcut list] to [Auto Action] items.

(2) Shortcut list

Displays the list of current shortcuts.

Memo

Items on lower levels can be displayed/hidden by the following operation:

- **Click ▼.**
- **Double click the item name.**

(3) Information area

Area where messages are displayed when the configured shortcut is duplicated and the like.

(4) Edit shortcut

Selecting the row of the item whose shortcut you want to edit and clicking the button enables shortcut editing. To change the shortcut, type the shortcut to configure and press the [Enter] key.

Memo

- **With Mac OS X, you cannot configure shortcuts duplicated with keyboard shortcuts configured in [System preference].**
- **Pressing the [Esc] key after typing the shortcut cancels the input setting.**
- **Double clicking the item in the Shortcut list also enables shortcut editing.**

(5) Add shortcut

Adds shortcut settings.

Selecting the row of the item to which you want to configure an additional shortcut and clicking the button adds a shortcut input field. Type the shortcut to configure and press the [Enter] key.

Memo

- **With Mac OS X, you cannot configure shortcuts duplicated with keyboard shortcuts configured in [System preference].**
- **Pressing the [Esc] key after typing the shortcut cancels the input setting.**

(6) Delete shortcut

Select the row of the item whose shortcut you want to delete and click the button. The shortcut of the selected item is deleted.

(7) OK

Saves the configured shortcuts and closes the dialog box.

(8) Cancel

Closes the dialog box without saving the configured shortcuts.

(9) Reset

Initializes the shortcut settings.

Modifier key settings [Windows]

The [Ctrl], [Alt], [Shift] and [Space] keys individually or combined, the mouse wheel, right click, tail switch can be assigned to tools to perform operations such as temporary tool switch, brush size change, and so on.

(1) Common settings

Select this item to configure modifier keys common to all tools.

(2) Settings for each process of tool

To configure modifier keys for each process of a tool separately, click the button on the right of [Sub tool]. The [Select Sub tool] dialog box to specify the sub tool displays.

[Output process] and [Input process] display the output/input process configured to the selected sub tool.

Memo

Modifier key settings are not configured by tool, but by output process and input process. Therefore, changing the modifier key setting for one sub tool also changes the setting of sub tools if they have the same output process or input process.
For [Output process] and [Input process], see "Input Process and Output Process of Sub Tools" .

(3) Refine

Narrows down the modifier key(s) displayed in [Operation].

(4) Operation

Displays a list of modifier keys that can be configured.

Select a function from the pull down menu. You can select from [None], [Common], [Tool aux. operation], [Change tool temporarily], [View operation] and [Change brush size].

Important

The functions you can configure vary depending on the modifier key.

None and Common

Does not configure any function to the modifier key.

- For [Common settings], select [None] from the pull down menu.
- For [Settings for each process of tool], select [Common] from the pull down menu. Selecting [Common] assigns the modifier key setting to all tools in common.

Tool aux. operation

Configures an auxiliary operation a tool can perform while in use.

Selecting [Tool aux. operation] displays the [Setting for tool aux. operation] dialog box. There, configure the details of the tool auxiliary operation.

Important

[Tool aux. operation] cannot be selected for processes without auxiliary operations. (Example of auxiliary operation: [Create special ruler])

(1) Turn on the auxiliary operation item to configure.

(2) Clicking [OK] configures the auxiliary operation.

Memo **Clicking [Settings] allows you to re-edit the [Tool aux. operation] settings.**

Change tool temporarily

Switches a tool or sub tool temporarily when a modifier key is pressed.

Selecting [Change tool temporarily] displays the [Setting for Change tool temporarily] dialog box. On the dialog box, configure the tool to change temporarily.

Memo **Items on lower levels can be displayed/hidden by the following operation:**

- **Click ▼.**
- **Double click the item name.**

(1) Select the tools and/or sub tools from the list.

(2) Clicking [OK] configures temporary switching of the tools and/or sub tools to the modifier key.

Memo **Clicking [Settings] allows you to re-edit the [Change tool temporarily] settings.**

View operation

Configures the operation when a modifier key is held down to a view operation such as zoom in/out, rotate and scroll.

Selecting [View operation] displays the [Setting for view operation] dialog box. There, configure the content of the view operation.

(1) Select a view operation from the list.

(2) Clicking [OK] configures the view operation to the modifier key.

Memo **Clicking [Settings] allows you to re-edit the [Setting for view operation] settings.**

Show menu

Displays the menu when a modifier key is pressed.

Change brush size

Allows you to change the brush size by dragging with the modifier key held down.

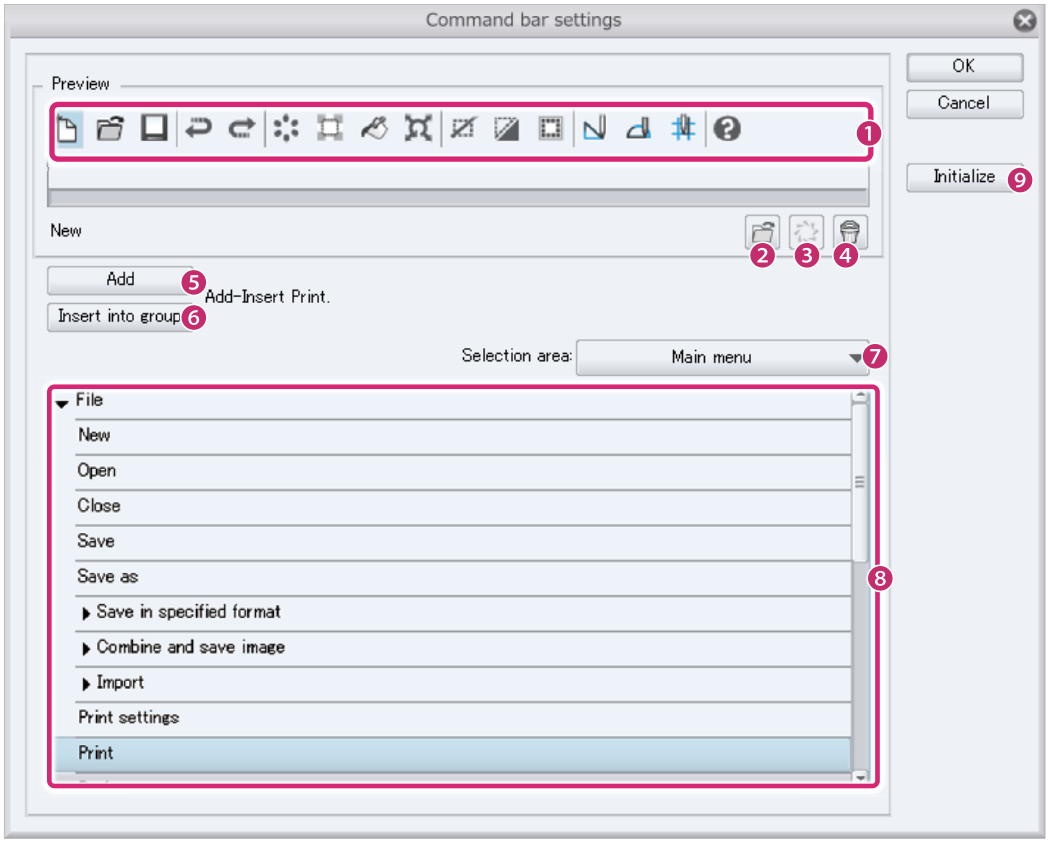
(5) Reset

Initializes the modifier key settings.

Command bar settings [Windows]

Edits the [Command bar] settings. Allows you to add/delete command icons to/from the [Command bar], as well as change the position of an icon.

[Command bar settings] Dialog Box



(1) Preview

Previews the [Command bar] being configured.

(2) Import file

Imports the image file to use as image for an icon. Clicking the button displays a dialog box to select the image file for the icon. The image may be one created by yourself.

Memo **Acceptable icon image file formats are: BMP, JPEG, PNG, TIFF and Targa.**

(3) Reset

Allows you to reset the icon settings.

(4) Delete

Deletes the command icon selected on the [Preview].

(5) Add

Adds a command icon to the [Preview].

(6) Insert into group

Arranges commands hierarchically and adds them to the command icon position selected in the [Preview}.

A ▼ displays on the right side of hierarchically arranged commends. Clicking the icon of a hierarchically arranged command displays the icon list of commands under it.

(7) Selection

Selects the category of the command to register.

Main menu	Changes the category of the item in [Command list] to [Main menu].
Auto action	Changes the category of the item in [Command list] to [Auto action].

(8) Command list

List to select a command to add to the [Command bar].

(9) Reset

Initializes the [Command bar] settings.

Adding a Command

To add a command icon to the [Command bar] proceed as follows.

1 Select the command

Select [File] menu → [Command bar settings]. The [Command bar settings] dialog box opens.

2 Decide the position where you want to add the command

In [Preview], click the icon in the position where you want to add the command.

Memo

The command icon will be added next to the clicked position.

3 Select the category

Select the category of the command to register from [Selection].

4 Select the command to add

Select the command to add from the [Command list].

5 Add the icon to the preview

Click [Add]. The selected command icon is added to [Preview].

Memo

The command icon can also be added by double clicking the menu item.

To change the position of a command icon in [Preview], drag and drop next to another icon.

Memo

To add or delete separator lines, or arrange the icons hierarchically, perform as follows:

- **To add a separator line, click between command icons.**
- **To delete a separator line, click the separator line.**
- **To arrange a command icon in the [Preview] hierarchically, drag and drop onto another icon.**

6 The icon is added to the command bar

Clicking [OK] closes the [Command bar settings] dialog box. The command icon is now added to the [Command bar].

Deleting a Command

To delete a command icon from the [Command bar] proceed as follows.

1 Select the command

Select [File] menu → [Command bar settings]. The [Command bar settings] dialog box opens.

2 Select the command to delete

In [Preview], select the command icon you want to delete.

3 Delete the icon from the preview

Clicking [Delete] displays a confirmation dialog box. Clicking [Delete] on the dialog box deletes the selected command icon from [Preview].

Memo

A command icon can also be deleted by dragging and dropping onto [Delete].

4 The icon is deleted from the command bar

Clicking [OK] closes the [Command bar settings] dialog box. The command icon is now deleted from the [Command bar].

Arranging commands hierarchically

To arrange command icons on the [Command bar] hierarchically, proceed as follows.

1 Select the command

Select [File] menu → [Command bar settings]. The [Command bar settings] dialog box opens.

2 Decide the position where you want to arrange the commands hierarchically

In [Preview], click the icon in the position where you want to arrange the commands hierarchically.

3 Select the category

Select the category of the command to register from [Selection].

4 Select the command to add

Select the command to add from the [Command list].

5 Arrange icons in the preview hierarchically

Click [Insert into group]. The command icons in [Preview] are arranged hierarchically.

Memo

- **A command icon in the [Preview] can also be arranged hierarchically by dragging and dropping onto another icon.**
- **When command icons are arranged hierarchically, ▼ displays next to the icon.**

6 Reorder the icons

The order in which commands are arranged hierarchically can be changed by displaying them as a list.

(1) Click the icon of the hierarchically arranged commands. The icons of the commands arranged hierarchically display as a list.

(2) Drag and drop the icon of the command whose position you want to change.

7 The icons on the command bar are arranged hierarchically

Clicking [OK] closes the [Command bar settings] dialog box. The icons on the [Command bar] are now arranged hierarchically.

Changing the icon of a command

To change the icon of a command, proceed as follows.

1 Select the command

Select [File] menu → [Command bar settings]. The [Command bar settings] dialog box opens.

2 Select the command icon

In [Preview], click the command icon you want to change.

3 Select the image file

Specify the image to use as icon.

(1) Click [Import file].

(2) The dialog box for selecting a file displays. Specify the file of the image you want to use as icon.

Memo **Acceptable icon image file formats are: BMP, JPEG, PNG, TIFF and Targa.**

4 The icon change is complete

Click [OK] on the [Command bar settings] dialog box.

The dialog box closes and the icon change on the [Command bar] is complete.

Memo **The icons on the [Command bar] and [Selection launcher] are common. Changing the icon of a command on the [Selection launcher] with the [Command bar settings] dialog box also changes the icon on the [Selection launcher].**

Tab-Mate Controller [Windows]

Assigns Manga Studio 5.0 operations to the Tab-Mate Controller (sold separately). Also allows for commands to be assigned to the Tab-Mate Controller [Quick menu].

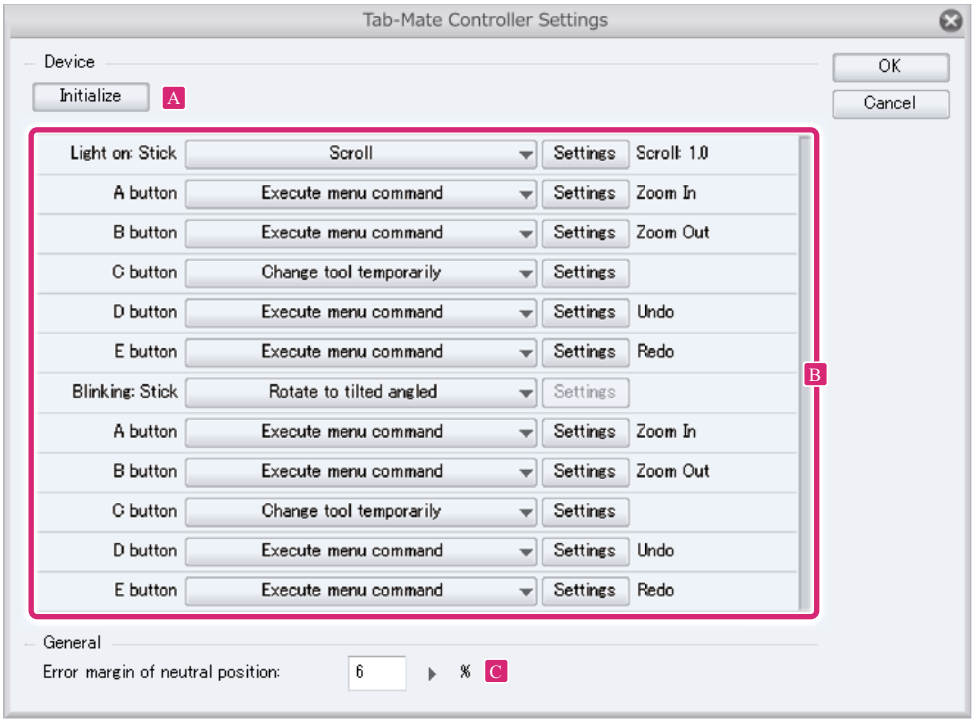
Tab-Mate Controller settings

Assigns Manga Studio 5.0 operations to the Tab-Mate Controller. It also allows you to adjust the sensitivity of the control stick when it is in the center.

Memo

To purchase Tab-Mate Controller (sold separately), see the Creative Activity Support Site "CLIP"(Japanese only).

- **URL: http://www.clip-studio.com/**



A. Reset

Initializes the Tab-Mate Controller settings.

B. Function settings

Assigns Manga Studio 5.0 operations to the Tab-Mate Controller.

Functions that can be configured vary depending on whether they will be assigned to the control stick or buttons.

Memo **For names of Tab-Mate Controller parts, see "Names and Functions of Parts of the Tab-Mate Controller" .**

(1) Control Stick

Functions you can configure to the control stick are as follows.

Disable

Does not assign any function to the control stick.

Scroll

Scrolls the canvas in the direction the control stick is tilted.

Clicking [Settings] opens the [Settings for canvas operation] dialog box. On the dialog box, you can configure the scroll amount for the canvas.

Scroll	By moving the slider, configure the amount by which the canvas will displace. The larger the value, the larger will be the amount by which the canvas will displace.
Fix speed	Turning on this item displaces the canvas at a fixed speed. If turned off, the speed at which the canvas will displace will be proportional to the degree the control stick is tilted.

Rotate to tilted angled

Rotates the canvas in the direction the control stick is tilted.

Rotate by turning

- Rotating the control stick clockwise rotates the canvas clockwise.
- Rotating the control stick counterclockwise rotates the canvas counterclockwise.

Clicking [Settings] opens the [Settings for canvas operation] dialog box. On the dialog box, you can configure the rotation amount for the canvas.

Rotate	By moving the slider, configure the amount by which the canvas will zoom in/out. The larger the value, the larger will be the amount by which the canvas will rotate.

Zoom by turning

- Rotating the control stick clockwise zooms in the canvas.
- Rotating the control stick counterclockwise zooms out the canvas.

Clicking [Settings] opens the [Settings for canvas operation] dialog box. On the dialog box, you can configure the zoom amount for the canvas.

Zoom	By moving the slider, configure the amount by which the canvas will zoom in/out. The larger the value, the larger will be the amount by which the canvas will zoom in/out.

Zoom by up/down, rotate by left/right

- Tilting the control stick upward zooms in the canvas.
- Tilting the control stick downward zooms out the canvas.
- Tilting the control stick to the right rotates the canvas clockwise.
- Tilting the control stick to the left rotates the canvas counterclockwise.

Clicking [Settings] opens the [Settings for canvas operation] dialog box. On the dialog box, you can configure the rotation amount and zoom amount for the canvas.

Zoom	By moving the slider, configure the amount by which the canvas will zoom in/out. The larger the value, the larger will be the amount by which the canvas will zoom in/out.
Rotate	By moving the slider, configure the amount by which the canvas will rotate. The larger the value, the larger will be the amount by which the canvas will rotate.
Fix speed	Turning on this item zooms in/out or rotates the canvas at a fixed speed. If turned off, the speed at which the canvas will zoom in/out or rotate will be proportional to the degree the control stick is tilted.

(2) Buttons

Selecting the function to configure from the pull down menu displays the related dialog box for you to configure the function.

Memo

Clicking [Settings] also displays the related dialog box.

Disable

Does not assign any function to the button.

Execute menu command

Assigns a Manga Studio 5.0 menu item to the button. Configure the content on the dialog box.

(1) Select the menu item from the dialog box.

(2) Clicking [OK] assigns the function.

Execute option command

Assigns an auxiliary operation of the items below to the button.

- Canvas
- Tool property
- Brush size
- Drawing color

Configure the content on the dialog box.

(1) Select the item from the dialog box.

(2) Clicking [OK] assigns the function.

Change tool temporarily

Switches a tool or sub tool temporarily when the button is pressed. Configure the content on the dialog box.

(1) Select the tool or sub tool from the list.

(2) Clicking [OK] assigns the function.

Memo

Items on lower levels can be displayed/hidden by the following operation:

- **Click ▼.**
- **Double click the item name.**

Allocate modifier key

Makes a button work in the same way as when a modifier key ([Ctrl], [Shift], [Alt] or [Space]) is pressed. Configure the content on the dialog box.

(1) Select the modifier key to assign. Selecting multiple items is equivalent to pressing multiple modifier keys simultaneously.

(2) Clicking [OK] assigns the function.

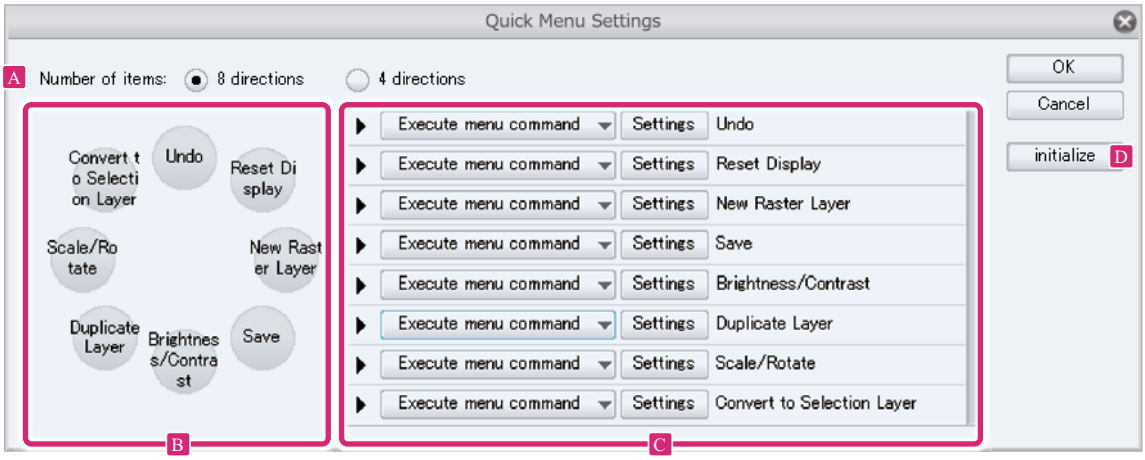
C. Error margin of neutral position

Adjusts the sensitivity of the control stick when it is in its center. When conditions such as a canvas not scrolling as operated, or a canvas scrolling on its own occur, they may be improved by adjusting this value.

Quick menu settings

Assigns menu items to the Tab-Mate Controller [Quick menu].

Memo **For how to use the [Quick menu], see "Explanation: Using the Quick menu" .**



A. Number of items

Specifies the number of menu items to assign. Select from [8 directions] and [4 directions].

B. Preview

Previews the menu items assigned to the control stick.

C. Function settings

Assigns menu items to the [Quick menu].

In the Quick menu, there are two items: [Root menu] and [Child menu].

Root menu	Items displayed when the Quick menu is started.
Child menu	Items displayed when the control stick is tilted for a while in the direction of the [Root menu].

Memo

If the control stick is kept tilted, the [Root menu] switches to [Child menu]. To display the [Root menu] when the [Quick menu] is displayed, place the control stick in the neutral position.

To toggle between the [Root menu] and [Child menu], click ▼ (triangle).

- When ▼ (triangle) is turned to the right, the [Root menu] can be configured.
- When ▼ (triangle) is turned downward, the [Child menu] can be configured.

To configure, proceed as follows.

Disable

Does not assign any menu item.

Execute menu command

Assigns a Manga Studio 5.0 menu item. Clicking [Settings] displays the [Settings for Execute menu command] dialog box.

Memo

Placing the mouse cursor over [Settings] will allow you to check in [Preview] the direction of the control stick to which the function will be assigned.

(1) Select the menu item from the dialog box.

(2) Clicking [OK] assigns the function.

D. Reset

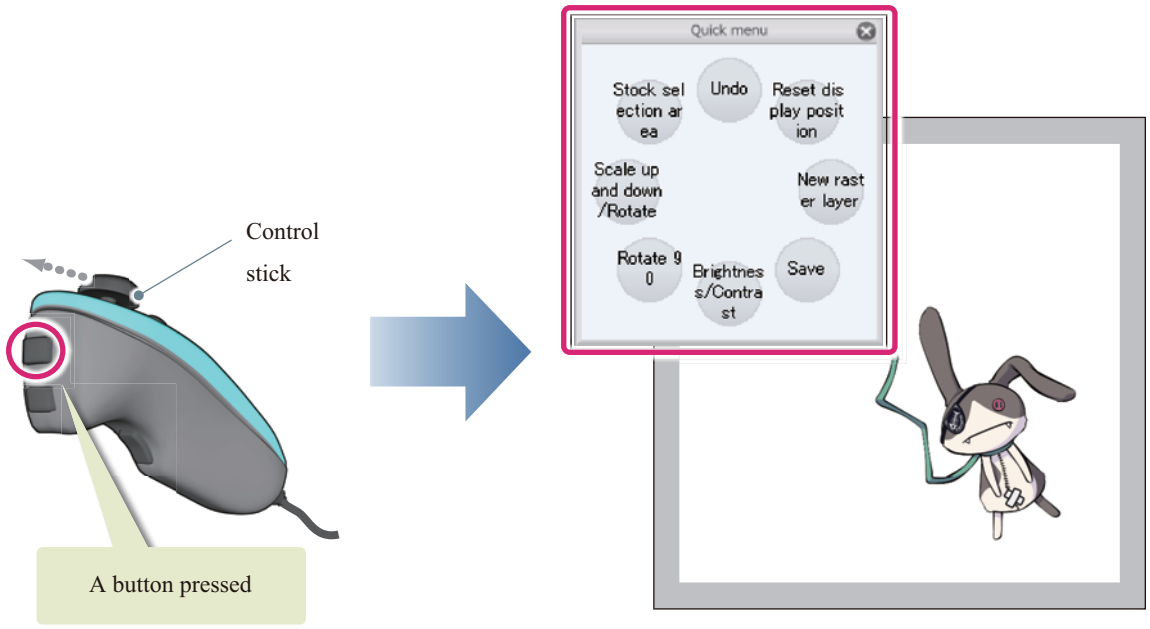
Initializes the [Quick menu] settings.

Explanation: Using the Quick menu

[Quick menu] is a menu that allows you to execute a menu item assigned to a tilt direction of the Tab-Mate Controller control stick. To use the [Quick menu], proceed as follows.

1 Start the Quick menu

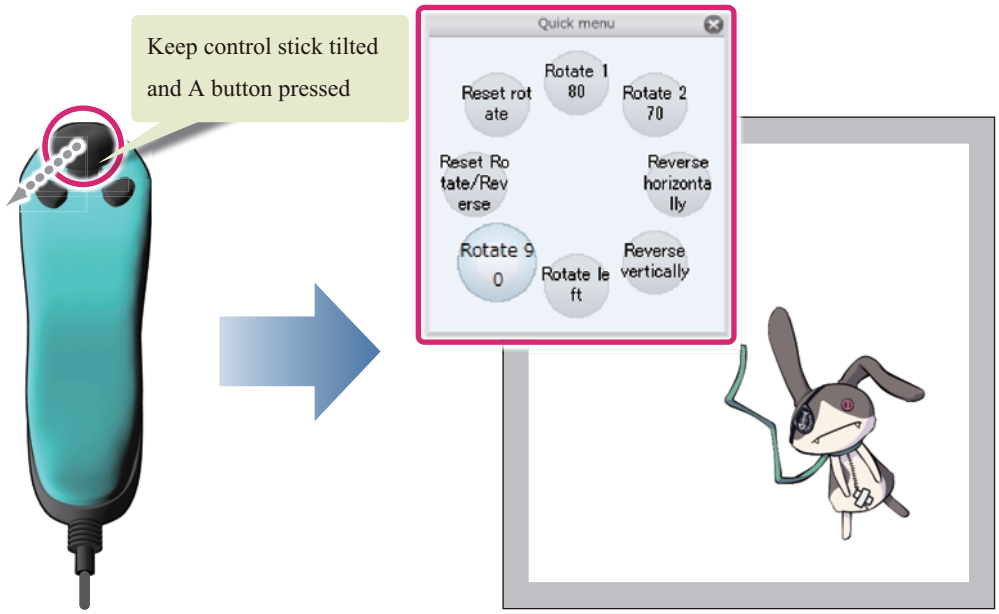
Tilt the control stick while holding down the A button of the Tab-Mate Controller. The [Quick menu] displays. Keep the A button of the Tab-Mate Controller down even after the [Quick menu] is displayed.



Important **Releasing the A button will close the [Quick menu]. Keep the button down while operating the [Quick menu].**

2 Select the Root menu item

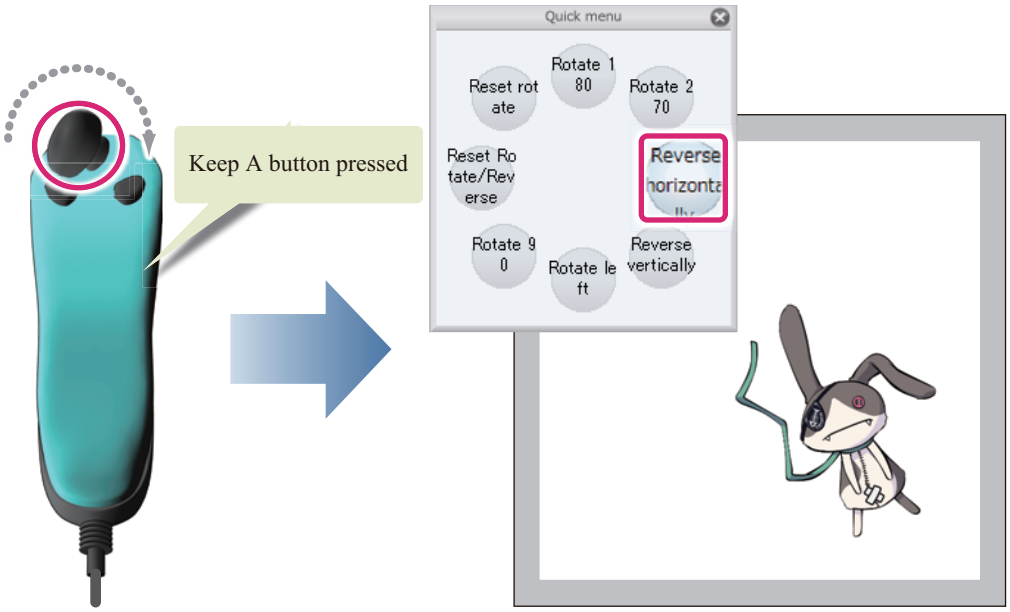
While holding down the A button of the Tab-Mate Controller, tilt the control stick in the direction in which the Root menu you want to execute is displayed. The [Child menu] displays.



Memo For how to configure the [Quick menu], see "Quick menu settings" .

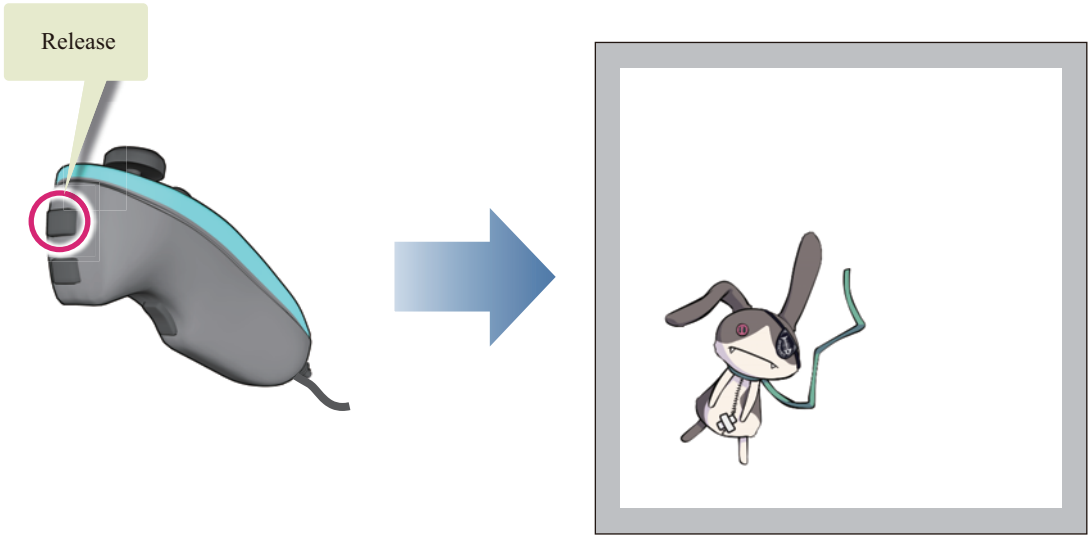
3 Select the menu item

With the A button of the Tab-Mate Controller still held down, tilt the control stick in the direction in which the menu you want to execute is displayed.



4 Execute the menu item

Release the A button of the Tab-Mate Controller. The selected menu item executes.

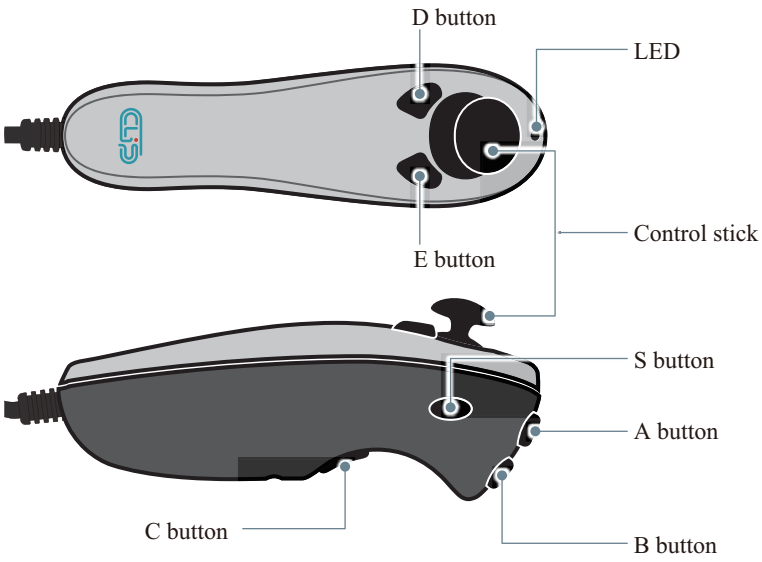


Memo **Releasing the A button of the Tab-Mate Controller when the control stick is in the neutral position cancels the [Quick menu].**

Names and Functions of Parts of the Tab-Mate Controller

The following describes the name of each part of the Tab-Mate Controller, and how to check/switch the operating mode.

Name of Each Part



Checking the Operating Mode

The current operating mode is displayed with a LED. The button and control stick operation vary for each operating mode.

Red (On/Blinking)	You can assign Manga Studio 5.0 operation to the Tab-Mate Controller by selecting [File] menu → [Tab-Mate Controller settings].
Blue (On/Blinking)	You can use the Tab-Mate Controller as a mouse.

Switching the Operating Mode

To switch the operating mode:

- Long press the control stick to toggle the LED between on and blinking.
- Press the S button to toggle between the red and blue LED.

Pen Pressure Settings [Windows]

Adjusts the pen pressure detection level applicable when a tablet is used.

1 Select the command

Selecting [File] menu → [Pen Pressure Settings] displays the [Auto adjust pen pressure] dialog box.

2 Adjust the pen pressure detection level

On the [Auto adjust pen pressure] dialog box, adjust the pen pressure detection level.

(1) Click [Adjust].

(2) Select the adjustment method.

(3) Draw a line on the canvas with the usual pen pressure, and by alternatively pressing hard and softly on purpose.

(4) Click [OK].

[Auto adjust pen pressure] Dialog Box

(1) Adjust

Click and then draw a line on the canvas. The pen pressure will be detected, and the detection level adjusted.

(2) Try adjusted result

Click to test the adjusted pen pressure detection level by drawing on the canvas.

(3) Adjust by one stroke

If you draw multiple lines on the canvas, the pen pressure detection level is adjusted based on the line drawn last.

(4) Adjust by multiple strokes

If you draw multiple lines on the canvas, the pen pressure detection level is adjusted based on the average of the drawn lines.

(5) Graph

The pen pressure detection level is displayed as a curve.

Memo

You can adjust the pen pressure detection level by dragging the control points of the curve.

- **Dragging a control point changes its position.**
- **Clicking on the curve adds a control point.**
- **Dragging a control point out of the graph deletes that control point.**

(6) Previous setting

Reverts the curve to the status before adjustment.

(7) Reset

Reverts the curve to the default state.

QUMARION [Windows]

Enables the use of QUMARION in Manga Studio 5.0, as well as import/export of calibration information.

Use QUMARION

Turning on this item enables the use of QUMARION in Manga Studio 5.0.

Memo

You will not be able to use QUMARION without turning on [Use QUMARION]. Once turned on, [Use QUMARION] remains enabled until you quit Manga Studio 5.0.

Import calibration information

Imports a QUMARION calibration file (extension: qnca) to calibrate QUMARION.

Memo

For details on calibration of QUMARION, see "Explanation: When Displayed 3D Character Is Misaligned" .

Export calibration information

Exports the QUMARION calibration information as a QUMARION calibration file (extension: qnca).

Memo

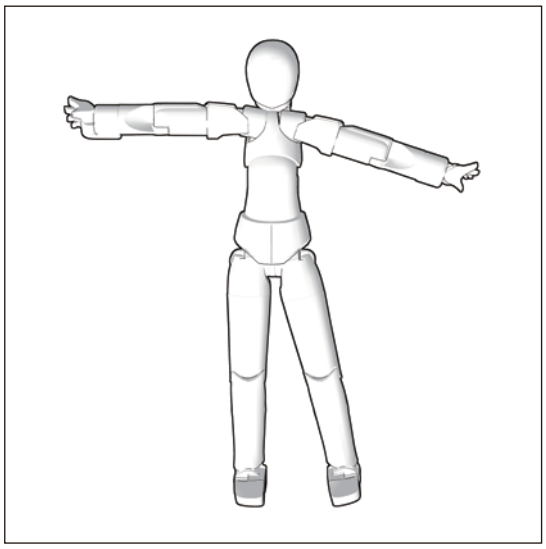
For details on calibration of QUMARION, see "Explanation: When Displayed 3D Character Is Misaligned" .

Explanation: When Displayed 3D Character Is Misaligned

When the QUMARION pose and the displayed 3D character are misaligned, correct using [Calibration] on the [Object launcher].

Perform a calibration when you cannot align the displayed 3D character even by making the QUMARION pose symmetric.

The following describes the calibration procedure when the QUMARION pose and the displayed 3D character are misaligned as shown in the figures below.

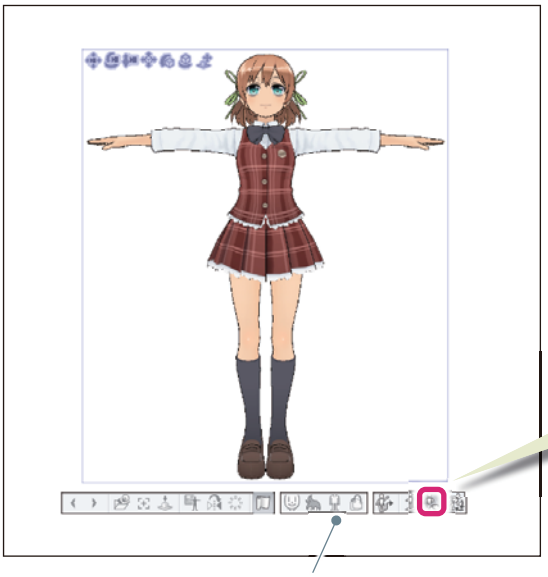


QUMARION pose

3D character material view

1 Enable calibration

Click [Calibration] on the [Object launcher].

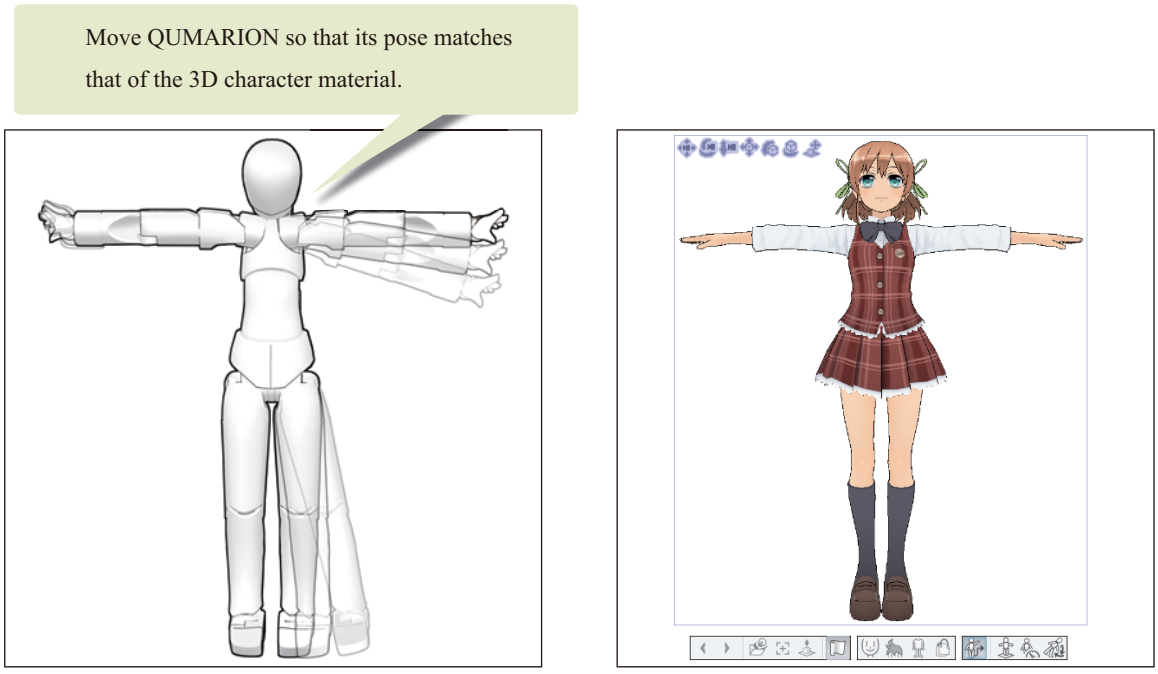


Object launcher

Click [Calibration].

2 Operate QUMARION

Operate QUMARION so that its pose matches that of the 3D character.

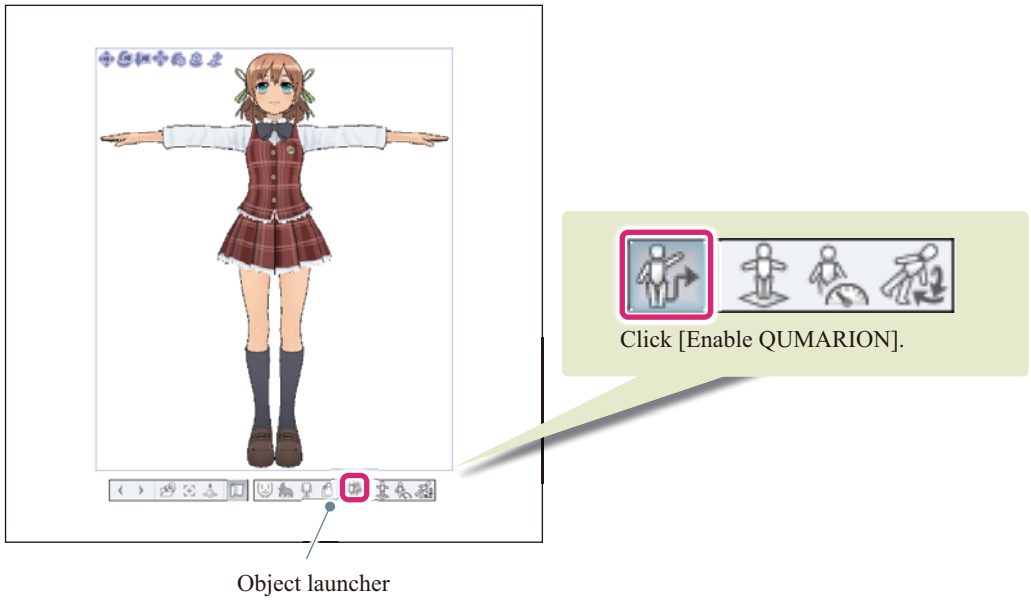


QUMARION pose

3D character material view

3 Enable QUMARION input

Click [Enable QUMARION] on the [Object launcher]. The displayed 3D character and QUMARION pose become the same.



Object launcher

Memo

- To export the calibration information, select [File] menu → [QUMARION] → [Export calibration information]. To import an exported calibration information, select [File] menu → [QUMARION] → [Import calibration information]. Note that [Import calibration information] and [Export calibration information] are available only when [Enable QUMARION] is turned on.
- You can also import calibration files (extension: qnca) created in CLIP STUDIO ACTION. For details on CLIP STUDIO ACTION, see the Creative Activity Support Site "CLIP (Japanese only) " (http://www.clip-studio.com/clip_site/).

Install Material [Windows]

Allows you to install materials by selecting [File] menu → [Install Material] and starting the installer.

Important

Running [Install Material] closes Manga Studio. Be sure to save your data and the like before running [Install Material].

Organaize Materials [Windows]

Reorganizes material database from actual material data.

Reset Installed Materials [Windows]

Resets preinstalled material to initial state.

Memo

- **Name, property, save folder, etc. of preinstalled material are reset to initial state.**
- **Materials, which are added or created by the user, are not initialized.**

Quit Manga Studio [Windows]

Closes Manga Studio 5.0.

Edit Menu

The [Edit] menu is mainly for performing edit operations on images.

Undo

Selecting [Edit] menu → [Undo] cancels the last operation.

Redo

Selecting [Edit] menu → [Redo] immediately after undoing, redoes the undone operation.

Cut

Copies the selected area of an image to the clipboard and clears that portion from the image on the canvas.

1 Create a selection

Using a Marquee tool, create a selection area.

(1) Display the [Layer] palette and select the target layer. In this example, [Feather] is selected.

(2) Using a Marquee tool, create a selection area.

Memo

- **Cutting without selecting an object and without creating a selection cuts the layer itself.**
- **If [Object] of the [Operation] tool is in use, the object selected by [Object] is cut.**

2 Select the command

Select [Edit] menu → [Cut].

The selected area of the image is copied to the clipboard and cleared from the original position.

Copy

Copies the selected area of an image to the clipboard. The copied portion remains on the canvas.

1 Create a selection

Using a Marquee tool, create a selection area.

(1) Display the [Layer] palette and select the target layer. In this example, [Feather] is selected.

(2) Using a Marquee tool, create a selection area.

Memo

- **Copying without creating a selection copies the entire layer.**
- **If [Object] of the [Operation] tool is in use, the object selected by [Object] is copied.**

2 Select the command

Select [Edit] menu → [Copy].

The selected area of the image is copied to the clipboard. The image on the canvas remains the same.

Paste

Pastes the image copied to the clipboard to a canvas.

In this example, the feather will be selected, cut, and then pasted.

1 Create a selection

Using a Marquee tool, create a selection area.

Memo

- **Cutting without creating a selection cuts the entire layer.**
- **If [Object] of the [Operation] tool is in use, the object selected by [Object] is cut.**

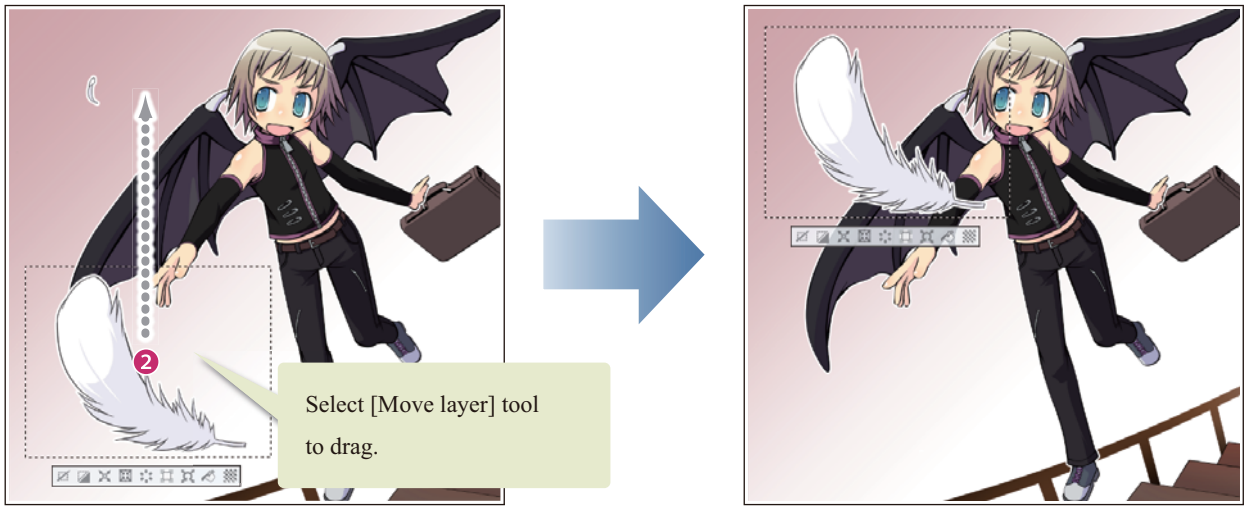
2 Cut the selection

Select [Edit] menu → [Cut].

3 Select the command

Select [Edit] menu → [Paste].

(1) The image that has been copied to the clipboard is pasted to a new layer in the [Layer] palette.



(2) The image is pasted to the position from where it was copied. To change the position of the image, select the newly created layer on the [Layer] palette and drag the image with the [Layer move] tool.

Memo

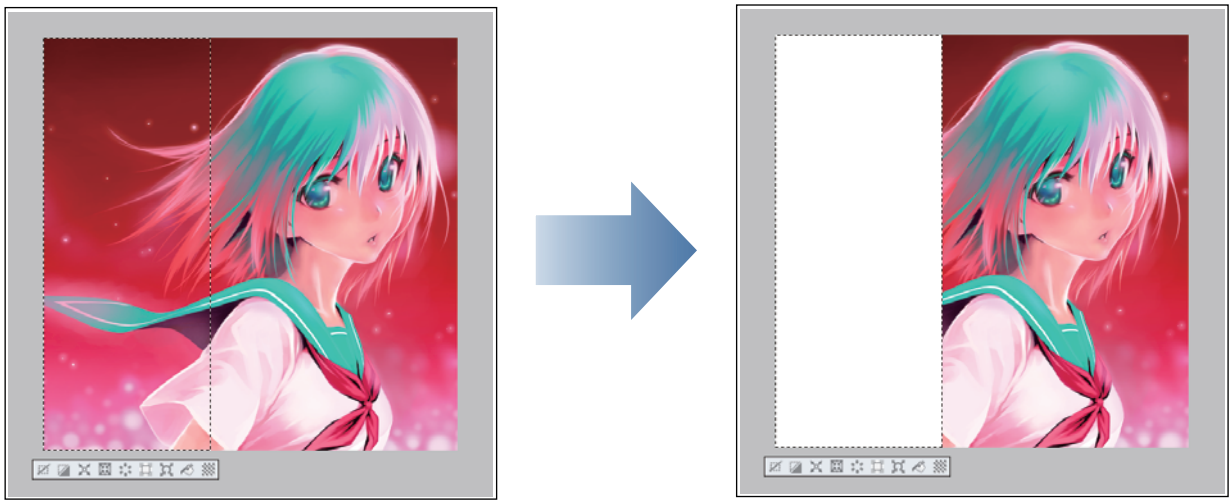
Lines and balloons in vector format cut or copied with the [Object] tool are pasted to the currently edited layer.

Clear

Selecting [Edit] menu → [Clear] clears the selected object. For layers such as the [Image material] layer and [Frame border] layer that do not allow objects to be selected, the entire layer is cleared.

Raster layer

The drawing inside a selected area is cleared.

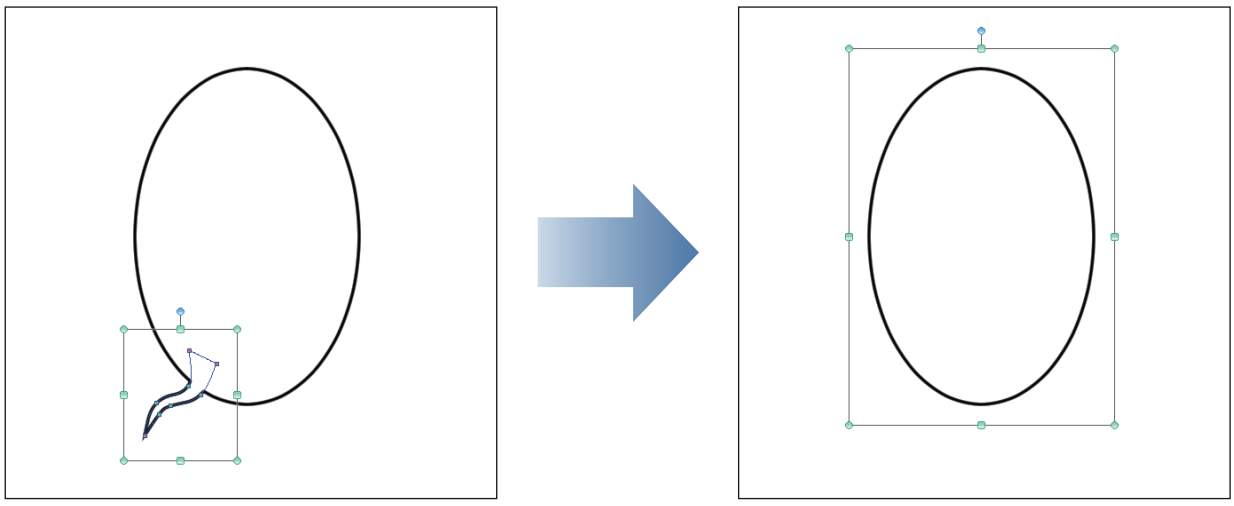


Memo

Clearing without creating a selection clears the entire layer.

When [Object] Sub Tool Is in Use

If [Object] of the [Operation] tool is in use, the object selected by [Object] is cleared.



Clear outside of selected area

Clears the content outside the selected area.

1 Create a selection

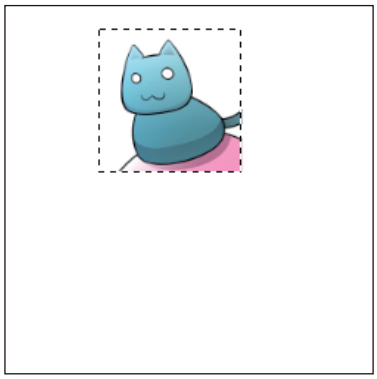
Create a selection.

2 Select the command

Select [Edit] menu → [Clear outside of selected area].

3 Clear outside of the selection is complete

The content outside the selected area is cleared.



Fill

Fills a selected area in a specified color.

1 Create a selection

Using a Marquee tool, create a selection.

Memo **Filling without creating a selection fills the entire layer.**

2 Select the layer

On the [Layer] palette, select the layer you want to fill.

3 Select the command

Select [Edit] menu → [Fill].

4 Fill of the selected area is complete

The selected area is filled.

Advanced fill

Fills based on detailed conditions configured on the [Advanced fill] dialog box.

Applicable layer types	Raster layer Selection layer Quick mask

[Advanced fill] Dialog Box

(1) Drawing color

Select the fill color. Available colors vary depending on the expression color of the layer.

When expression color is gray or monochrome (drawing color is black only)

Select the fill color from [Black] and [Transparent color].

When expression color is gray or monochrome (drawing color is white only)

Select the fill color from [White] and [Transparent color].

When expression color is monochrome (drawing color is black and white)

Select the fill color from [Main drawing color], [Sub drawing color], [Transparent color], [Specified color], [Black] and [White].

[Main drawing color], [Sub drawing color] and [Transparent color] can also be selected using the color icons on the right.

When expression color is gray (drawing color is black and white)

Select the fill color from [Main drawing color], [Sub drawing color], [Transparent color] and [Specified color].

- [Main drawing color], [Sub drawing color] and [Transparent color] can also be selected using the color icons on the right.
- If you selected [Specified color], input the grayscale using the slider or by directly inputting the numeric value.

Color

Select the fill color from [Main drawing color], [Sub drawing color], [Transparent color] and [Specified color].

- [Main drawing color], [Sub drawing color] and [Transparent color] can also be selected using the color icons on the right.
- If you selected [Specified color], click the color indicator. Specify the color on the dialog box for selecting a color that displays.

Memo **For details on expression color and drawing color, see "Explanation: Expression Color and Drawing Color" .**

(2) Opacity

Configure the opacity of the fill color.

Important **[Opacity] does not display when expression color is monochrome.**

(3) Combine mode

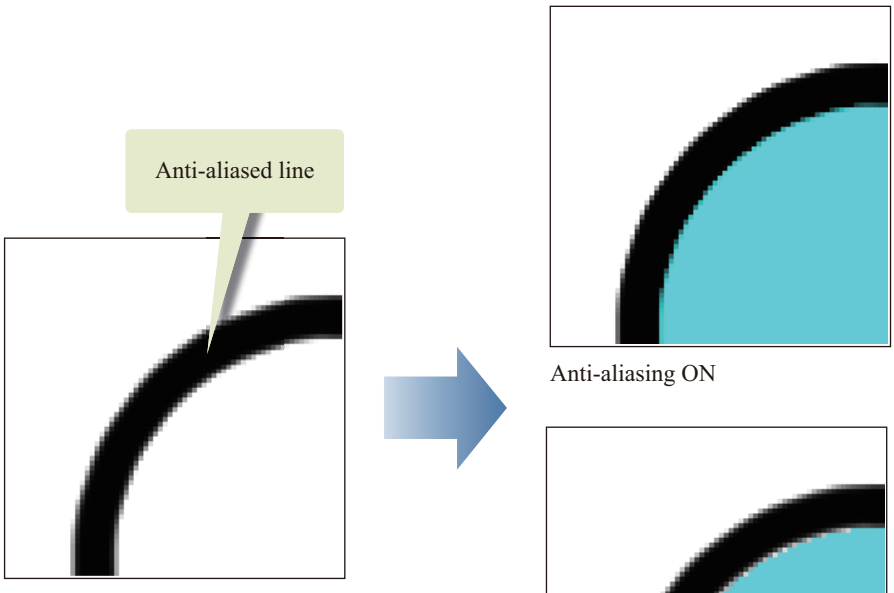
Configure the effect of the fill color used in the upper layer on the colors used in the lower layer. Select one from the combine modes described below.

Normal	Overlaps the drawing color used in the upper layer as-is to the drawing colors used in the lower layer.
Darken	Compares the drawing colors used in the lower layer with that used in the upper layer and replaces the colors in the lower layer with the darker one.
Multiply	Multiplies the drawing colors used in the lower layer by that used in the upper layer. After combine, the colors are darker than the originals.
Color burn	Produces an effect similar to the "burn" in silver halide photography. The drawing colors used in the lower layer are first darkened to enhance contrast and then, combined with that used in the upper layer.
Linear burn	The drawing colors used in the lower layer are first darkened and then, combined with that used in the upper layer.
Black burn	Darkens the drawn area producing an effect similar to underexposure in photography. The effect does not apply to areas of the lower layer drawn in transparent.
Subtract	Subtracts the drawing colors used in the lower layer and that used in the upper layer. After combine, the colors are darker than the originals.
Lighten	Compares the drawing colors used in the lower layer with that used in the upper layer and replaces the colors in the lower layer with the brighter one.
Screen	The drawing colors used in the lower layer are first inverted and then, multiplied by that used in the upper layer. After combine, the colors are brighter than the originals.
Color dodge	As with "dodge" in silver halide photography, brightens the colors used in the lower layer to decrease contrast.
Glow dodge	Produces stronger effect on semi-transparent areas than [Color dodge].
White burn	Brightens the drawn area producing an effect similar to overexposure in photography.
Add	Adds the drawing colors used in the lower layer and that used in the upper layer. After combine, the colors are brighter than the originals.
Add (Glow)	Produces stronger effect on semi-transparent areas than [Add].
Overlay	Combines by applying [Multiply] or [Screen] depending on the overlapped colors. After combine, bright areas are brighter and dark areas, darker.
Soft light	Produces different results depending on the density of the overlapped colors. When colors brighter than 50% grayscale are overlapped, the result is brighter than the originals, as in dodge. When colors darker than 50% grayscale are overlapped, the result is darker than the originals, as in burn. When 50% grayscale colors are overlapped, the lower layer remains unchanged, as before the overlap. Areas not overlapping with colored areas become white.

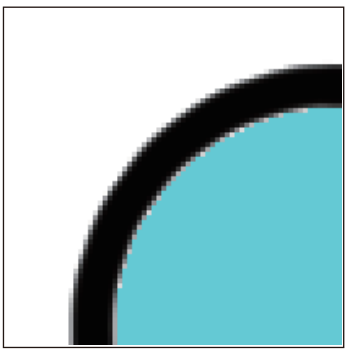
Hard light	Produces different results depending on the density of the overlapped colors. When colors brighter than 50% grayscale are overlapped, the result is brighter than the originals, as with [Screen]. When colors darker than 50% grayscale are overlapped, the result is darker than the originals, as with [Multiply]. When 50% grayscale colors are overlapped, the lower layer remains unchanged, as before the overlap. Areas not overlapping with colored areas become white if a color brighter than 50% grayscale is selected, and the selected color if a color darker than 50% grayscale is selected.
Difference	Subtracts the drawing colors used in the lower layer and that used in the upper layer and replaces the colors in the lower layer with the absolute value of the difference.
Erase	The drawing is erased.
Background	Places the color used afterwards below those used before. The color used afterwards becomes the color used before.
Replace alpha	Draws in such a way as to make the opacity of the drawn image equivalent to the opacity specified in the dialog box.
Compare density	Paints only when the opacity of the color used in the upper layer is higher than that of the lower layer.
Erase (compare)	Erases the drawing only when the result of subtracting the opacity of the color used in the upper layer from 100 is smaller than the opacity of the color used in the lower layer.

(4) Anti-aliasing

Toggles anti-aliasing between on and off. When turned on, anti-aliasing is applied after fill if an area bordering an anti-aliased line is filled.



Anti-aliasing ON

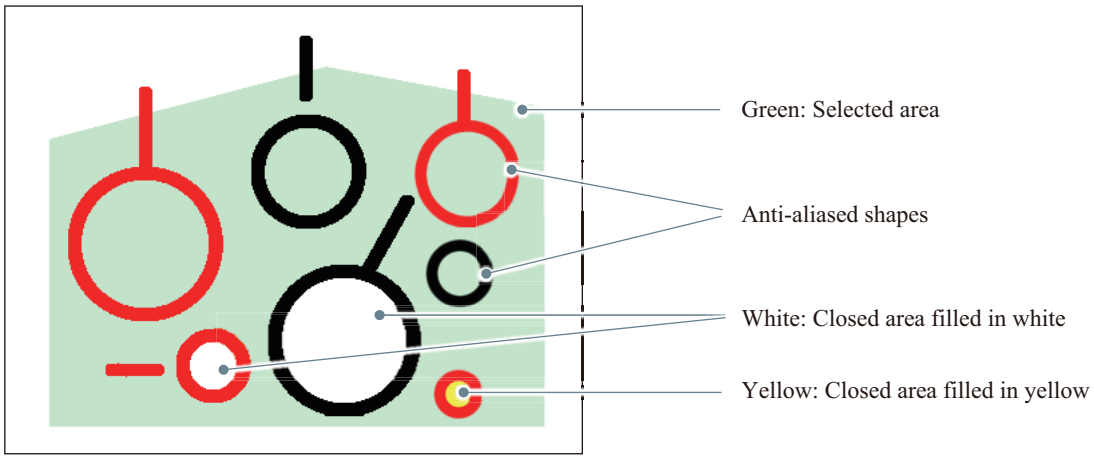


Anti-aliasing OFF

(5) Target color

Refers to the specified color to decide whether or not to fill.

The effect of this item on fill will be described using the following figure as an example.



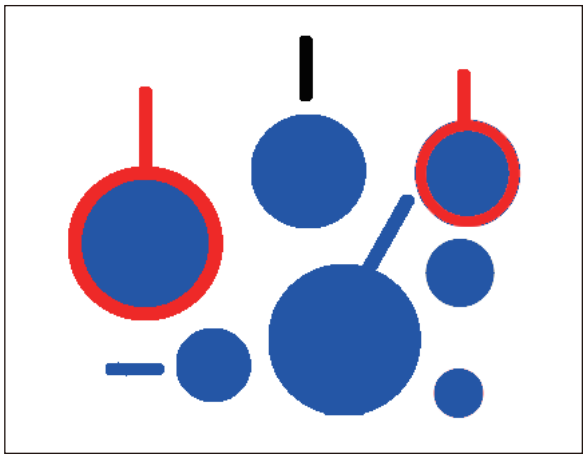
Memo

- **Changing the [Target color] setting or adjusting the [Color margin] value may improve run over of the fill color.**
- **Items that may be selected for [Target color] are partially different depending on whether [Fill closed area] is turned on or off.**

Target all colors

The result of fill varies depending on whether [Fill closed area] is turned on or off.

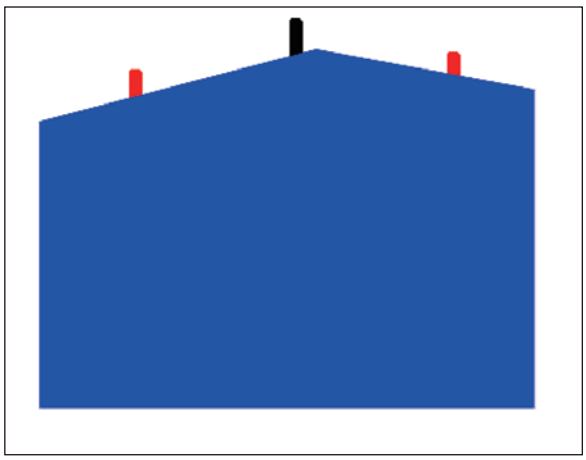
When [Fill closed area] is turned on, all closed areas in the selected area are filled.



[Fill closed area] ON:

All closed areas within the selected area are filled.

When [Fill closed area] is turned off, the selected area itself is filled.

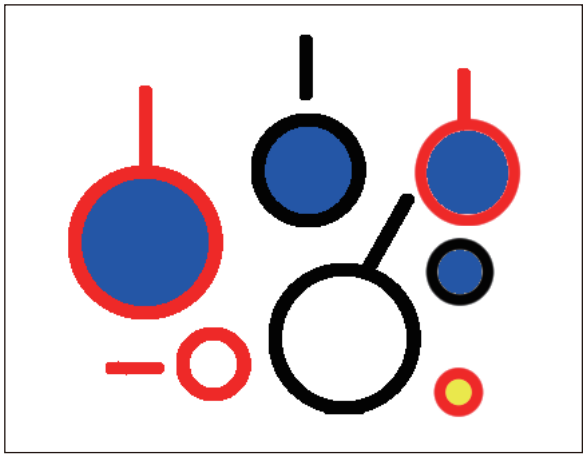


[Fill closed area] OFF:

The selected area is entirely filled.

Only transparent

Fills transparent areas.

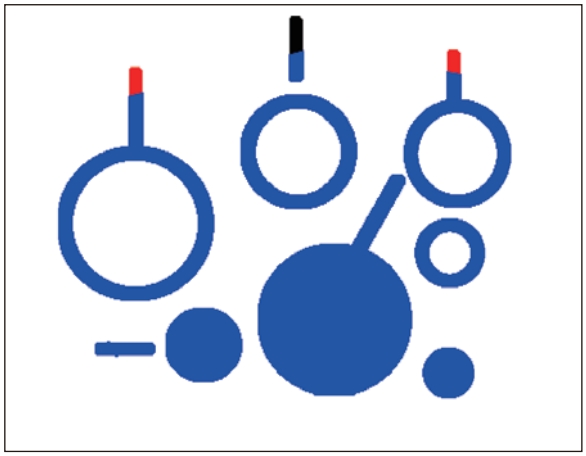


Closed transparent areas are filled.

Areas filled in white or any other color are not filled.

Other than transparent

Fills non-transparent areas. This item is displayed when [Fill closed area] is turned off.

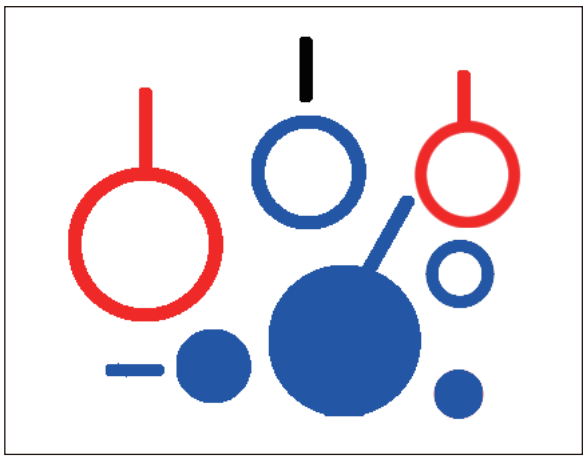


Non-transparent areas are filled.

Lines outside of the specified area are not filled.

Area surrounded by transparent

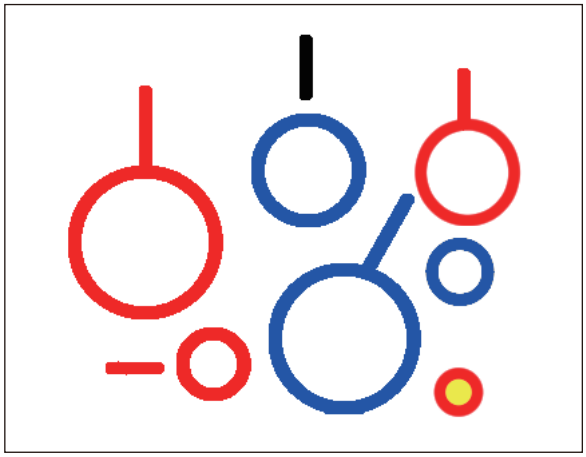
Fills areas surrounded by transparent. This item is displayed when [Fill closed area] is turned on.



Areas surrounded by transparent are filled.
Lines and shape outside the specified area are not filled.

Only black

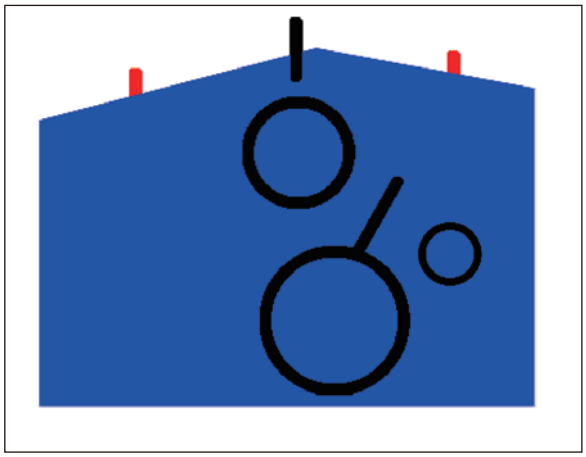
Fills areas drawn in black.



Black within the specified area is filled.
Lines outside the specified area are not filled.

Other than black

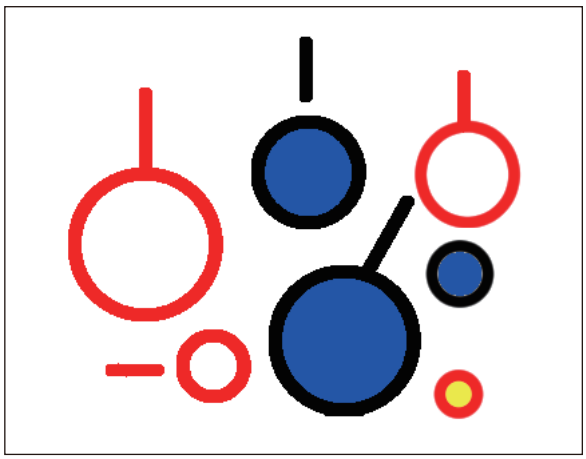
Fills areas drawn in other than black. This item is displayed when [Fill closed area] is turned off.



Areas drawn in other than black are filled.
Lines outside the specified area are not filled.

Area surrounded by black

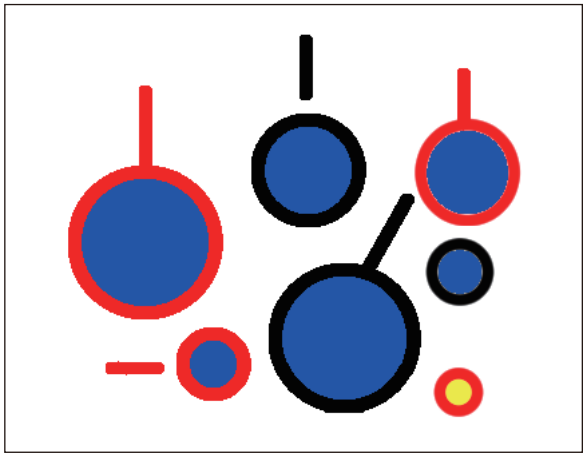
Fills areas surrounded by black. This item is displayed when [Fill closed area] is turned on.



Only areas enclosed in black and within the specified area are filled.

Only white and transparent

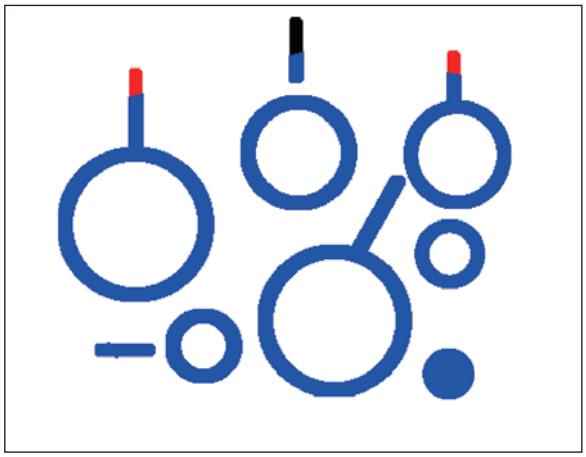
Fills areas drawn in white and transparent areas.



Enclosed areas that are white or transparent are filled.

Other than white and transparent

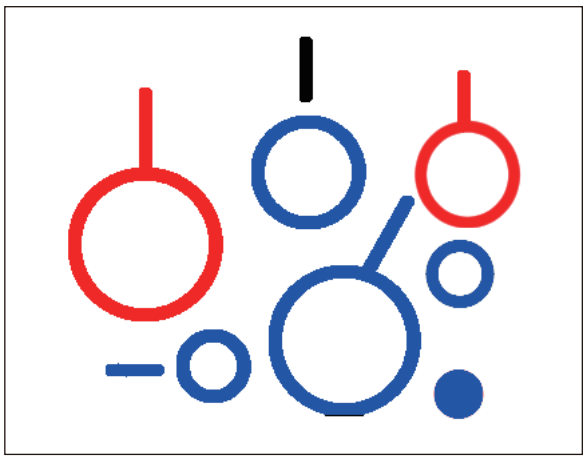
Fills areas drawn in other than white and non-transparent areas. This item is displayed only when [Fill closed area] is turned off.



Areas drawn in other than white and non-transparent areas are filled.
Lines outside the specified area are not filled.

Area surrounded by white and transparent

Fills areas surrounded by white and areas surrounded by transparent. This item is displayed when [Fill closed area] is turned on.

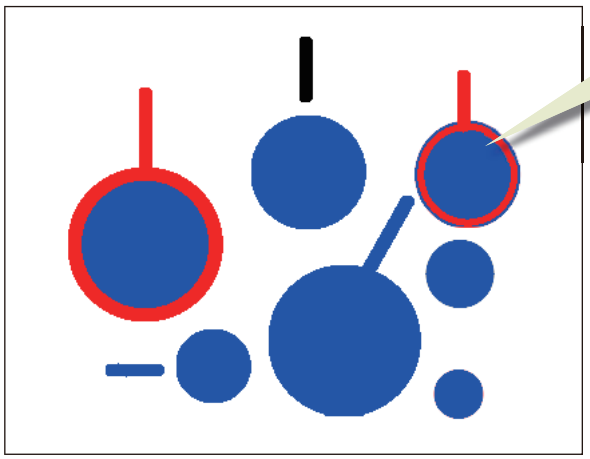


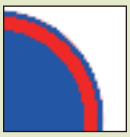
Areas surrounded by white or transparent are filled.
Lines and shapes outside the specified area are not filled.

Treat pale transparent as transparent

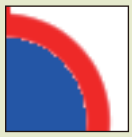
The result of fill varies depending on whether [Fill closed area] is turned on or off.

When [Fill closed area] is turned on, pale semi-transparent areas created by anti-aliasing and the like are treated as transparent and filled.





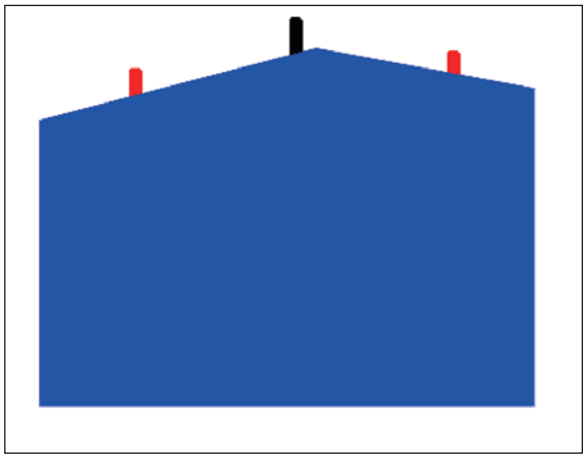
Enlarged view



Reference: Only transparent area

[Fill closed area] ON:
Areas of all colors are filled.
When this item is selected, only translucent areas created by anti-aliasing and the like are out of the scope of fill.

When [Fill closed area] is turned off, the selected area itself is filled.

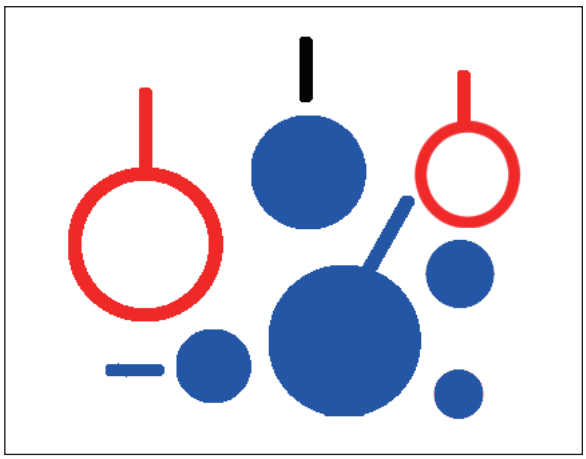


[Fill closed area] OFF:
The selected area is entirely filled.

Other than transparent and inner transparent

The result of fill varies depending on whether [Fill closed area] is turned on or off.

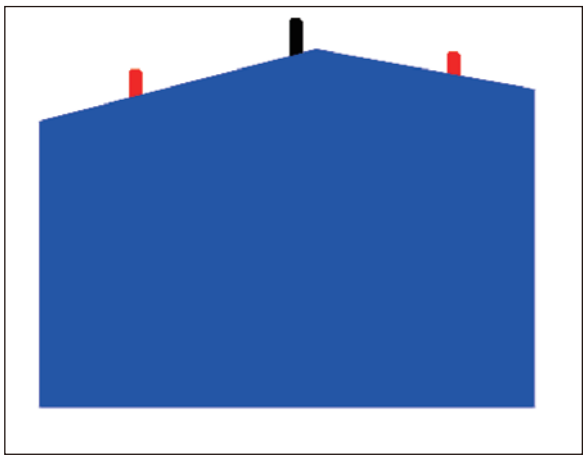
When [Fill closed area] is turned on, the inside of the outer perimeter is filled if the selected area completely includes the outer perimeter.



All shapes including lines within the specified area are filled.

Lines and shapes outside the specified area are not filled.

When [Fill closed area] is turned off, the selected area itself is filled.



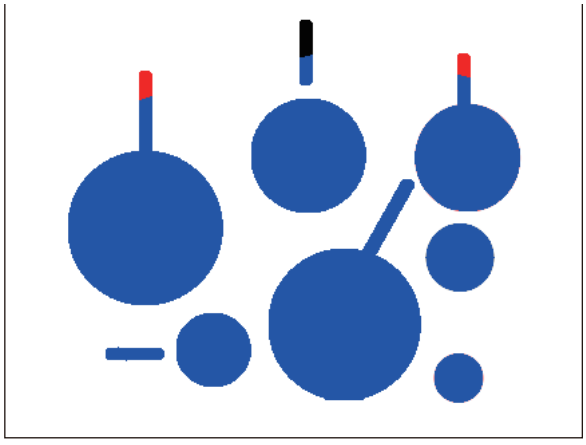
[Fill closed area] OFF:

The selected area is entirely filled.

Apply open area too other than transparent

The result of fill varies depending on whether [Fill closed area] is turned on or off.

When [Fill closed area] is turned on, the drawing lines and transparent areas enclosed by drawing lines are filled.

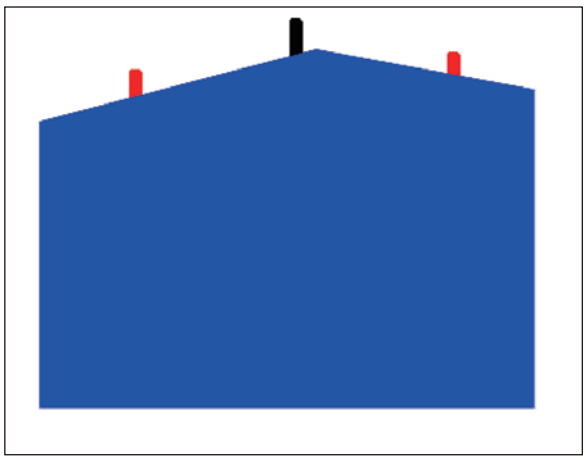


[Fill closed area] ON:

Transparent areas within the selected area that are enclosed by drawn lines are filled.

Areas outside the specified area are not filled.

When [Fill closed area] is turned off, the selected area itself is filled.



[Fill closed area] OFF:

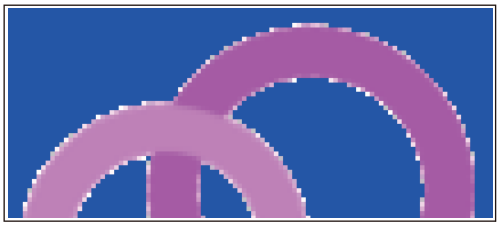
The selected area is entirely filled.

(6) Color margin

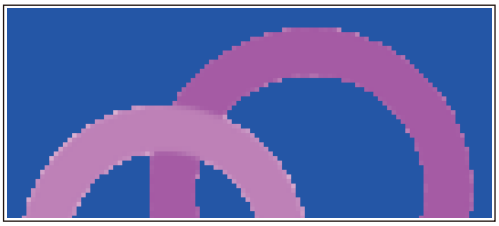
Specifies the color margin (tolerance) to recognize an area as the same when filling. The larger the value the larger will be the tolerance to include areas in other colors than the target.

Configure [Only transparent part] for [Target color] to fill in blue.

Before Advanced fill



Color margin: 0.0



Color margin: 50.0

(7) Area scaling

Enlarges or reduces the area to fill by the specified number of pixels.

Memo

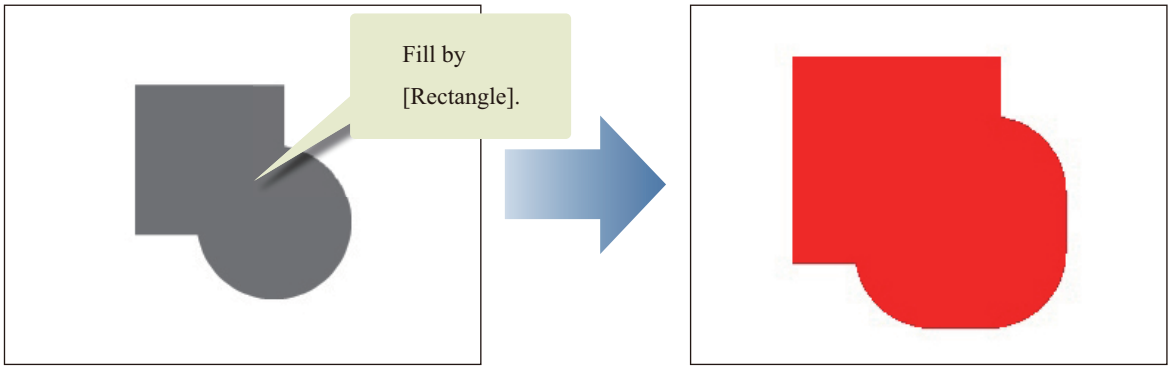
The unit of [Area scaling] can be changed on the [Preferences] dialog box. For details, see "File Menu" → "Preferences [Windows]" → "Ruler/Frame/Unit" .

(8) How to zoom

Configures the corner shape for enlarged or reduced areas.

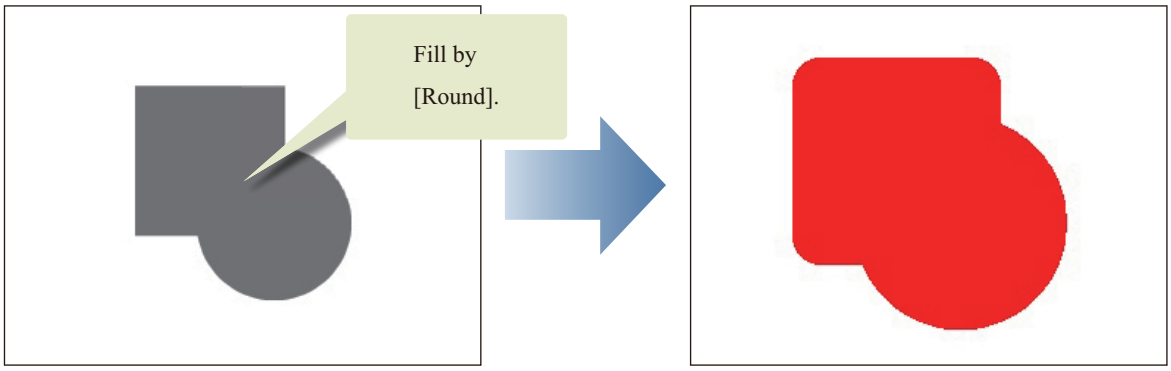
Rectangle

Determines the area by placing a rectangle on each pixel on the outline of the area to enlarge or reduce. The outline of the enlarged or reduced area often becomes rectangular.



Round

Determines the area by placing a circle on each pixel on the outline of the area to enlarge or reduce. The outline of the enlarged or reduced area becomes round as angles are rounded off.



To darkest pixel

Recognizes the area of the line with the darkest color and fills up to that area. If configured when enlarging the area with [Area scaling], it will prevent runovers to the outside of line pixels with maximum opacity.

[To darkest pixel]
OFF

[To darkest pixel]
ON

(9) Fill closed area

Turning on this item fills closed areas within a selected area.

(10) Close gap

When gaps are present in the area to fill, fills by closing gaps of up to a specified number of pixels.

Memo

The unit of [Close gap] can be changed on the [Preferences] dialog box. For details, see "File Menu" → "Preferences [Windows]" → "Ruler/Frame/Unit" .

(11) Multiple Referring

When turned on, it allows you to configure the layers to refer to when filling. If turned off, only the selected layer is referred to.

All layers	Refers to all layers. However, hidden layers cannot be referred to.
Reference layer	Refers to layers configured as reference layer.
Selected layer	Refers to layers that are selected on the [Layer] palette.
Layer in folder	Refers to layers within the layer folder. Layers not included in the same folder as the edited layer cannot be referred to.

(12) Not refer to draft

When turned on, the [Draft] layer is excluded from the targets of reference. This item can be configured when [Multiple referring] is turned on.

(13) Not refer to text

When turned on, the [Text] layer is excluded from the targets of reference. This item can be configured when [Multiple referring] is turned on.

(14) Not refer to editing layer

When turned on, layers for drawing are excluded from the targets of reference. This item can be configured when [Multiple referring] is turned on.

(15) Not refer to paper

When turned on, the [Paper] layer is excluded from the targets of reference. This item can be configured when [Multiple referring] is turned on.

(16) Refer image border

When turned on, includes the outer perimeter of the canvas in the border.

(17) Stop filling at center of vector

Selects the area up to the center line of vectors. This is valid only when [Vector] layers are referred to.

Change color of line to drawing *

Changes the color of (non-transparent) lines in a drawing to that selected in [Drawing color].

[Change color of line to drawing] can be used on the following layers.

Applicable layer types	Raster layer Vector layer

Important

[Change color of line to drawing] cannot be used for the following expression colors:

- **Gray or monochrome (black only)**
- **Gray or monochrome (white only)**

1 Select the layer

On the [Layer] palette, select the layer whose line color you want to change.

2 Create a selection

Using a [Marquee] tool, create a selection.

Memo

In the case of [Vector] layers, vector lines are cut at the edge of the created marquee for color conversion.

3 Select the drawing color

On a color palette, select a [Drawing color]. In this example, [Red] is selected.

4 Select the command

Select [Edit] menu → [Change color of line to drawing].

5 The change is complete

The drawing color of non-transparent portions in the selected area is now [Red].

Outline Selection

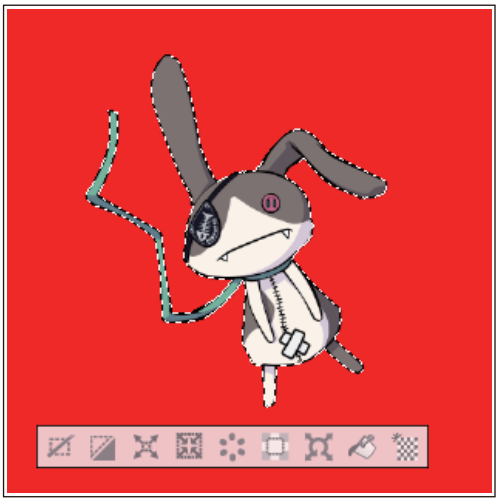
Creates an edge around the border of a selection area.

1 Specify the edge color

Select a color from the [Color set] palette and the like. In this example, yellow will be used.

2 Create a selection

Using a Marquee tool, create a selection.



3 Select the layer

On the [Layer] palette, select the layer where you want to draw the edge.

4 Select the command

Selecting [Edit] menu → [Outline Selection] displays the [Outline Selection] dialog box.

(1) Configure [Border type], [Line width] and the like.

(2) Click [OK].

5 The edge is drawn

The edge is drawn to the selected area.

[Outline Selection] Dialog Box

(1) Border type

Specify where to draw the edge.

Draw outside	Outside the border of the selected area.
Draw on border	In the center of the border of the selected area.
Draw inside	Inside the border of the selected area.

(2) Line width

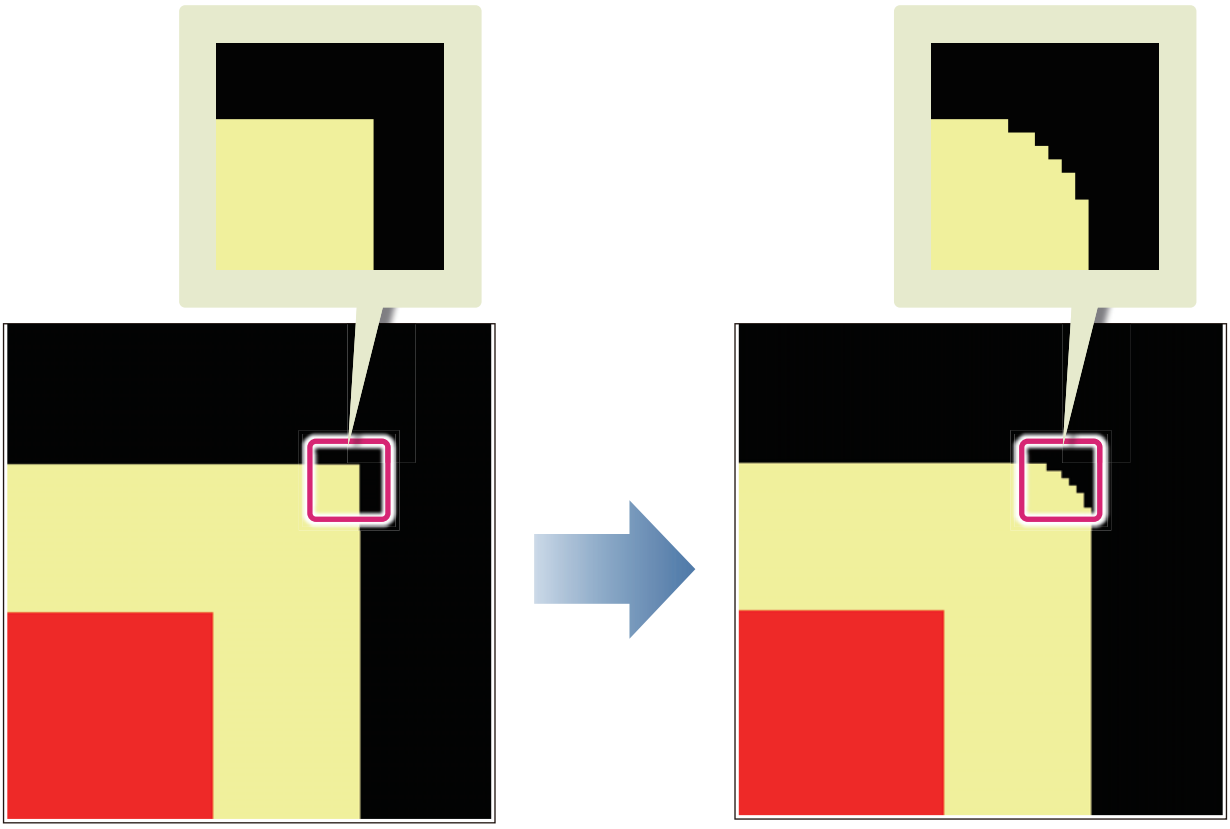
Specify the width of the edge.

Memo

The unit of [Line width] can be changed on the [Preferences] dialog box. For details, see "File Menu" → "Preferences [Windows]" → "Ruler/Frame/Unit" .

(3) Expansion type

Specify how to process the edge at the corners of the selected area. You can select from [Rectangle] and [Round].



Rectangle

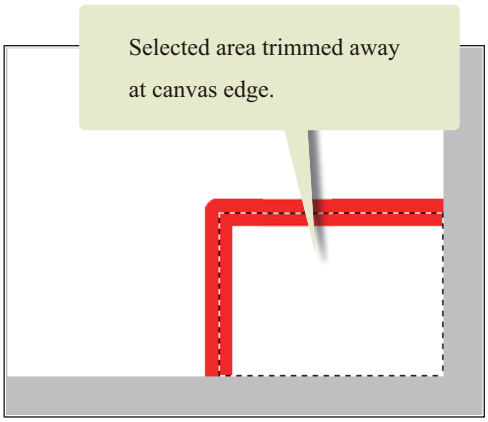
Round

Important

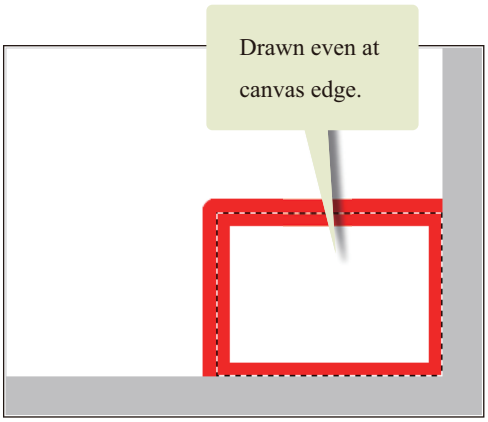
[Expansion type] is not available for [Vector] layers.

(4) Draw on canvas edge

When the created marquee is on the canvas edge, the selected area is trimmed away at the canvas edge, but you can select whether or not to have the edge line drawn.



[Draw at canvas edge] OFF



[Draw at canvas edge] ON

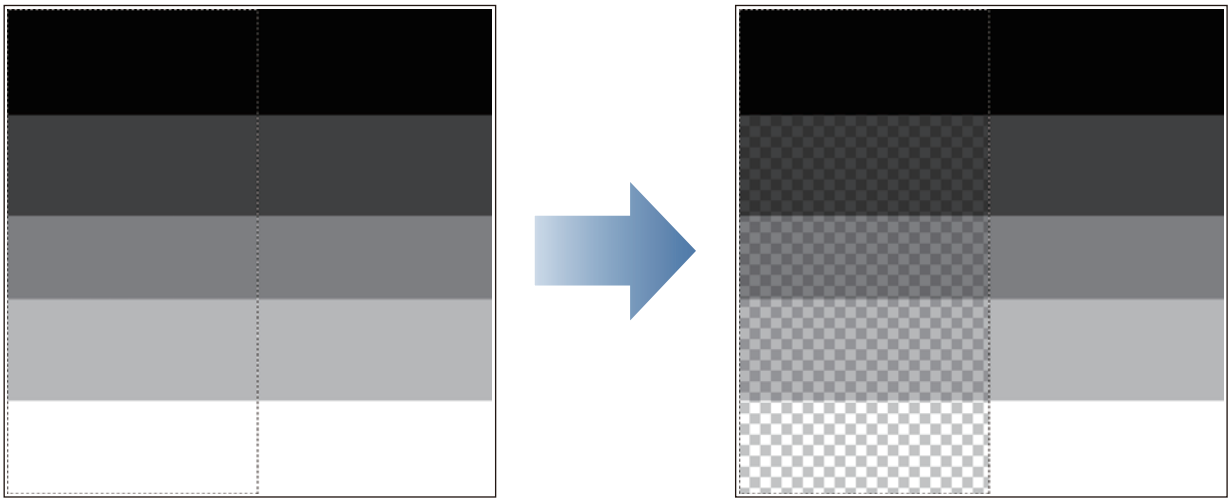
(5) Anti-aliasing

Allows you to configure the strength of anti-aliasing of a vector line to be created for a vector layer.

You can select from [None], [Weak], [Middle] and [Strong].

Convert brightness to opacity

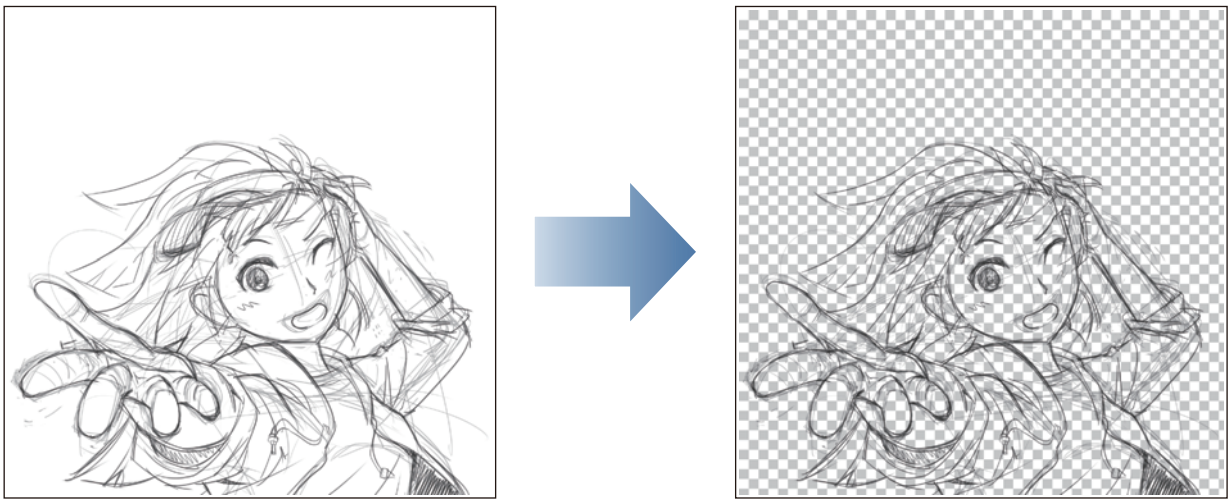
Converts the brightness of the image in the selected area into opacity.



Original image: Paper layer hidden

After Convert brightness into Opacity: Paper layer hidden

When a scanned grayscale image is converted, the closer is the grayscale to white the more transparent, and the closer is the grayscale to black the more opaque.



Original image: Paper layer hidden

After Convert brightness into Opacity: Paper layer hidden

Register image as material

Converts images inside a selected area, as well as gradation and monochrome layers into materials. Converted materials are registered in a [Material] palette.

Memo

For details on how to register in the [Material] palettes, see "Registering a Material" .

Register layer as template material

Registers a canvas and all layers included in the canvas as a whole in the [Material] palettes.

The registered material can be used as a template from [Template] on the [New] dialog box.

Memo

- **For details on how to register in the [Material] palettes, see "Registering a Material" .**
- **For details on the [New] dialog box, see "New" .**
- **The registered material can also be used as a normal material from the [Material] palettes.**
- **When a canvas composed of [Frame border folders] only is registered, it is registered as a [Framing template]. In all other cases, the canvas is registered as [Layer template]. Either material, [Framing template] or [Layer template], may be used as template.**

Color correction

Allows you to adjust image brightness, contrast, tone, gradation and the like.

Brightness/Contrast	Adjusts the brightness and contrast of the selected layer.
Hue/Saturation/Luminosity	Changes the color of the selected layer by adjusting the three components (hue, saturation and value) of the HSV color model.
Posterization	Converts an image into the specified gradation.
Reverse gradient	Inverts the colors in an image.
Level correction	Adjusts the contrast of an image using the histogram.
Tone curve	Adjusts the contrast of an image using the tone curve.
Color balance	Allows for image tone adjustment by configuring the balance of each RGB color for the selected layer.
Binarization	Converts the selected layer into a black and white duotone layer.

Brightness/Contrast

Adjusts the brightness and contrast of the selected layer.

Applicable layers	Raster layer (gray) Raster layer (color)

1 Select the layer

On the [Layer] palette, select a layer. In this example, the [Background] layer is selected.

2 Select the command

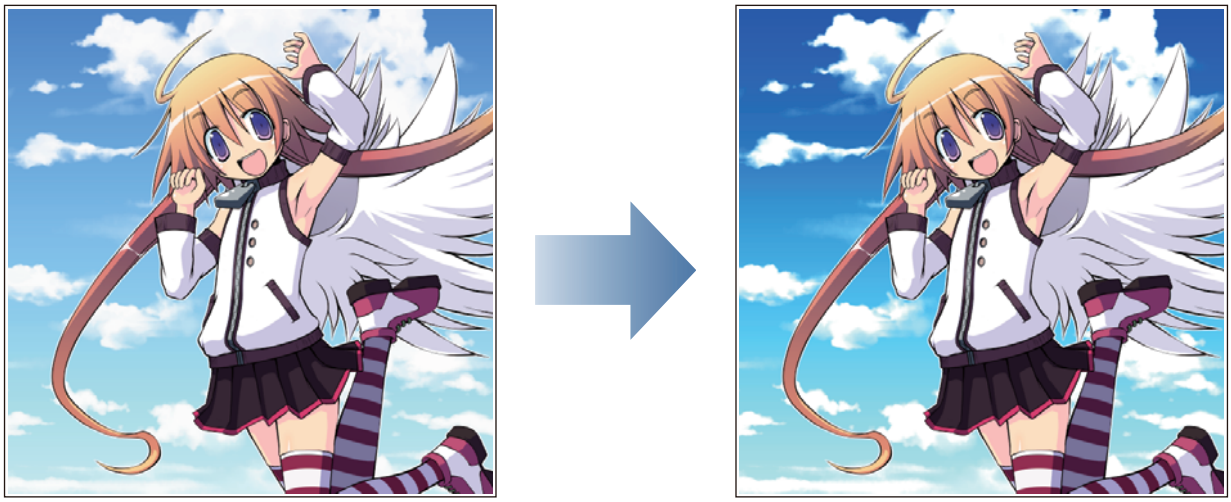
Select [Edit] menu → [Color correction] → [Brightness/Contrast]. The [Brightness/Contrast] dialog box displays. Configure the items on the dialog box.

(1) Adjust the brightness and contrast.

(2) Click [OK].

3 The adjustment of brightness and contrast is complete

The brightness and contrast of the background are now adjusted.



Original image　　Brightness: -50, Contrast: 50

[Brightness/Contrast] Dialog Box

(1) Brightness

Adjust the brightness of the image. The smaller the value, the darker will be the image while the larger the value, the brighter will be the image.

(2) Contrast

Adjust the contrast (difference between light and shadow) of the image. The smaller the value, the lower will be the contrast while the larger the value, the higher will be the contrast.

(3) Preview

Previews the image on the canvas.

(4) Auto adjust

Automatically adjusts [Brightness] and [Contrast] in accordance with the imported image.

Hue/Saturation/Luminosity

Changes the color of the selected layer by adjusting the three components (hue, saturation and value) of the HSV color model.

Applicable layers	Raster layer (color)

1 Select the layer

On the [Layer] palette, select a layer. In this example, the [Background] layer is selected.

2 Select the command

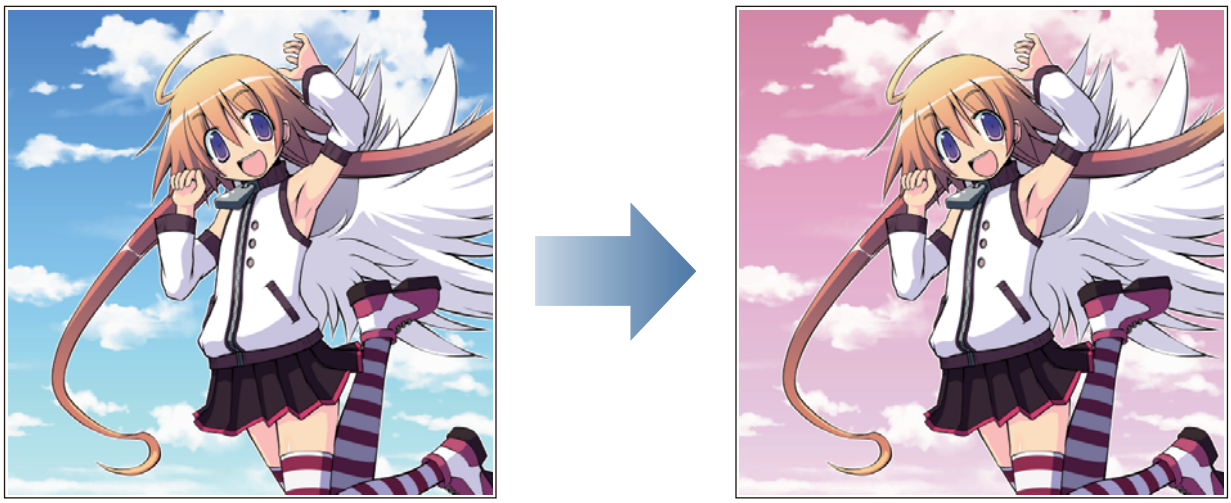
Select [Edit] menu → [Color correction] → [Hue/Saturation/Luminosity]. The [Hue/Saturation/Luminosity] dialog box displays. Adjust the color of the image by moving the sliders.

(1) Adjust the color of the image by moving the sliders [Hue], [Saturation] and [Luminosity].

(2) Click [OK].

3 The adjustment of hue, saturation and luminosity is complete

The color of the background is now adjusted.



Original image

Hue: 120, Saturation: -30, Luminosity: 25

[Hue/Saturation/Luminosity] Dialog Box

(1) Hue

Indicates gradation of color. Adjusts color types such as red, blue and yellow.

(2) Saturation

Adjusts the vividness of the color. The larger the value, the more vivid will be the color.

(3) Luminosity

Adjusts the brightness of the color. The larger the value, the brighter will be the color.

(4) Preview

Previews the image on the canvas.

Posterization

Converts an image into the specified gradation.

Applicable layers	Raster layer (gray) Raster layer (color)

Original image

After posterization: 3-level posterization

1 Select the layer

On the [Layer] palette, select a layer. In this example, the [Background] layer is selected.

2 Create a selection

Create a selection in the area where you want apply the filter.

Memo

If a selection is not created, the effect will apply to the entire canvas.

3 Select the command

Select [Edit] menu → [Color correction] → [Posterization]. The [Posterization] dialog box displays. On the [Posterization] dialog box, configure the effect.

(1) Configure the gradation.

(2) Click [OK].

4 The adjustment of the gradation is complete

The gradation is now adjusted.

[Posterization] Dialog Box

(1) Number of gradations

Configure the number of posterization levels.

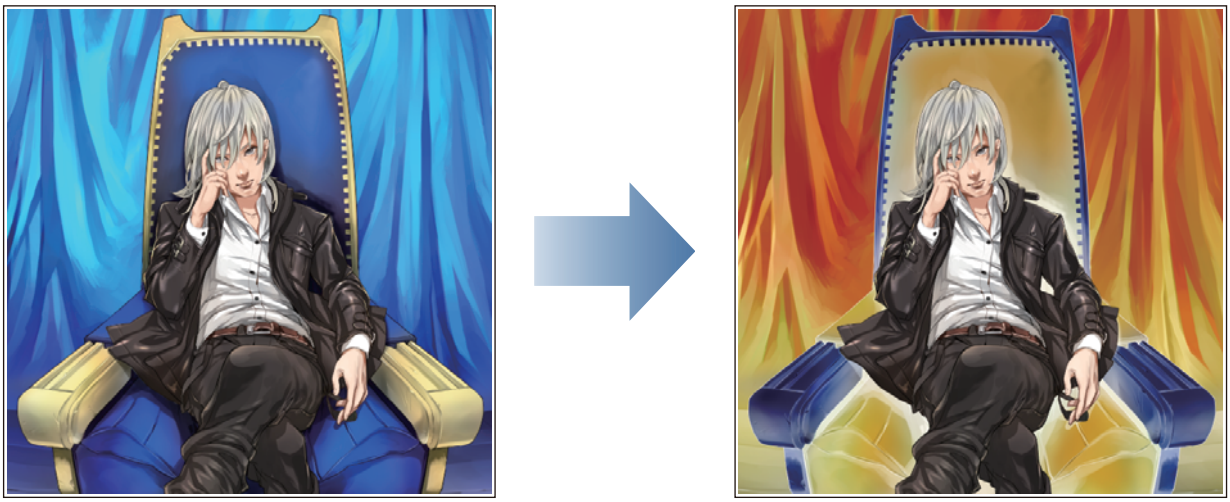
(2) Preview

Previews the image on the canvas.

Reverse gradient

Inverts the colors in an image.

Applicable layers	Raster layer (monochrome) Raster layer (gray) Raster layer (color)



Original image

After Reverse gradient

1 Select the layer

On the [Layer] palette, select a layer. In this example, the [Background] layer is selected.

2 Create a selection

Create a selection in the area where you want apply the filter.

Memo **If a selection is not created, the effect will apply to the entire canvas.**

3 Select the command

Select [Edit] menu → [Color correction] → [Reverse gradient].

4 The gradation is inverted

The image is displayed with the colors inverted.

Level correction

Adjusts the contrast of an image using the histogram.

Applicable layers	Raster layer (gray) Raster layer (color)

Original image

After level correction

1 Select the layer

On the [Layer] palette, select a layer. In this example, the [Character] layer is selected.

2 Select the command

Select [Edit] menu → [Color correction] → [Level correction]. The [Level correction] dialog box displays. Adjust the brightness of the image by moving the slider.

(1) Select the channel whose brightness you want to adjust.

(2) Turn on the [Preview] check box.

(3) Move the triangular [control point] at the base of the histogram to adjust the brightness of the image.

(4) Move the [control point] below [Output] to adjust the intensity of the brightest point and that of the darkest point in the image.

(5) Click [OK].

Memo

If either edge of the mountain in the histogram does not reach the range edge, move the control point to the edge of the mountain on that side. To correct the entire image, adjust in such a way as to spread the mountain across the entire histogram range.

3 The correction is complete

The contrast of the image on the layer is adjusted with the settings configured on the dialog box.

[Level correction] Dialog Box

(1) Channel

Select the channel whose level you want to correct from [RGB], [Red], [Green] and [Blue].

(2) Histogram

A graph where the information volume of the dark area (left side) and that of the bright area (right side) display as a mountain-like shape.

(3) Shadow input

Configure the darkest point in the image.

Normally place the darkest point on the left base of the mountain in the [Histogram].

(4) Gamma input

Configure the mean brightness of the image.

(5) Highlight input

Configure the brightest point in the image.

Normally place the brightest point on the right base of the mountain in the [Histogram].

(6) Shadow output

Configure the intensity of the darkest point in the image.

(7) Highlight output

Configure the intensity of the brightest point in the image.

(8) Preview

Previews the image on the canvas.

(9) Auto adjust

Automatically adjusts the contrast in accordance with the imported image.

Tone curve

Adjusts the contrast of the selected layer.

Applicable layers	Raster layer (gray) Raster layer (color)

Original image　　After contrast correction by tone curve

1 Select the layer

On the [Layer] palette, select a layer. In this example, the [Character] layer is selected.

2 Select the command

Select [Edit] menu → [Color correction] → [Tone curve]. The [Tone curve] dialog box displays. Adjust the contrast of the image by modifying the curve.

(1) Select the channel to adjust.

(2) Click on the curve to add a control point. Drag the control point to modify the curve and adjust.

(3) Click [OK].

Memo

- **To delete a control point, drag it outside the graph.**
- **The horizontal axis of the graph is the "input" value (original brightness) and the vertical axis, the "output" value (brightness after adjustment).**
- **In the background of the graph, the information volume of the dark area (left side) and that of the bright area (right side) of the original image are displayed as a mountain-like graph (histogram). Adjust the tone curve by checking the exposure balance of the original image in the histogram.**

3 The correction is complete

The contrast of the image on the layer is adjusted with the settings configured on the dialog box.

[Tone curve] Dialog Box

(1) Channel

Select the channel whose contrast you want to correct from [RGB], [Red], [Green] and [Blue].

(2) Tone curve

A graph to adjust the contrast of the image. Drag the control point to adjust.

The horizontal axis of the graph is the "input" value (original brightness) and the vertical axis, the "output" value (brightness after adjustment).

Memo

In the background of the graph, the information volume of the dark area (left side) and that of the bright area (right side) of the original image are displayed as a mountain-like graph (histogram). Adjust the tone curve by checking the exposure balance of the original image in the histogram.

(3) Preview

Previews the image on the canvas.

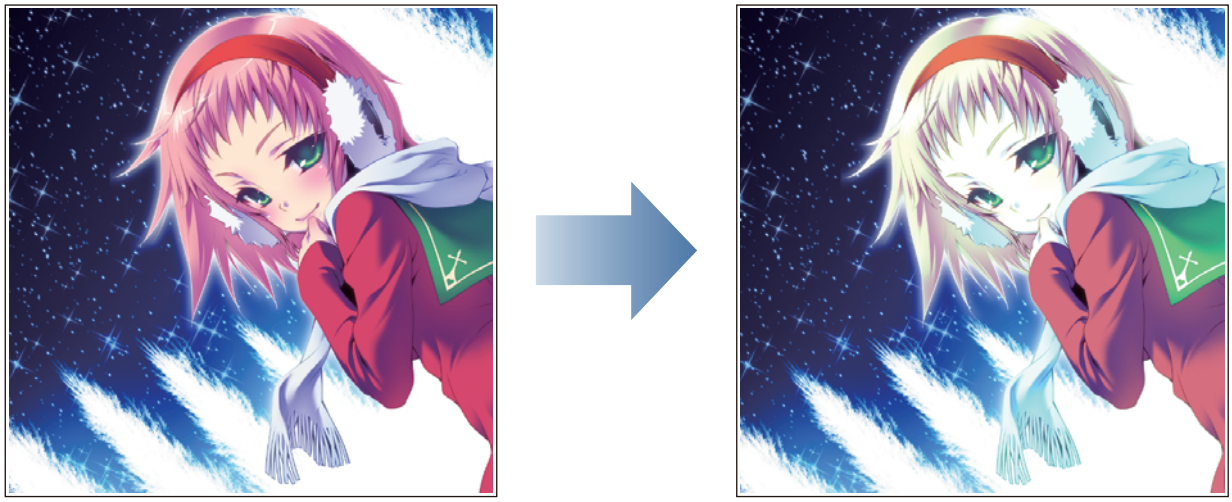
(4) Reset

Initializes the settings.

Color balance

Allows for image tone adjustment by configuring the balance of each RGB color for the selected layer.

Applicable layers	Raster layer (color)



Original image

After tone adjustment by color balance

1 Select the layer

On the [Layer] palette, select a layer. In this example, the [Character] layer is selected.

2 Select the command

Select [Edit] menu → [Color correction] → [Color balance]. The [Color balance] dialog box displays. Adjust the balance of each RGB color by modifying the graph.

(1) From [Gradation balance], select the item to adjust. You can configure color balance by item.

(2) Adjust the color by moving the [Color balance] sliders. You may also input the values in the [Color level] fields.

(3) If [Preview] is turned on, you can preview the settings on the canvas.

(4) Click [OK].

3 The correction is complete

The tone of the image on the layer is adjusted with the settings configured on the dialog box.

[Color balance] Dialog Box

(1) Color balance

Adjust the color balance of the image with the sliders. When the [Cyan/Red], [Magenta/Green] and [Yellow/Blue] sliders are moved to the right, the colors respectively become more red, green and blue while they respectively become more cyan, magenta and yellow when moved to the left.

The value of each slider is displayed in [Color level]. From left to right, they are the current values of [Cyan/Red], [Magenta/Green] and [Yellow/Blue]. You can also adjust by inputting values in there.

(2) Gradation balance

Select the gradation balance for the image from [Shadow], [Half tone] and [Highlight]. You can adjust the color balance for each gradation as the settings are managed separately.

(3) Keep brightness

Keeps the brightness when gradation is adjusted.

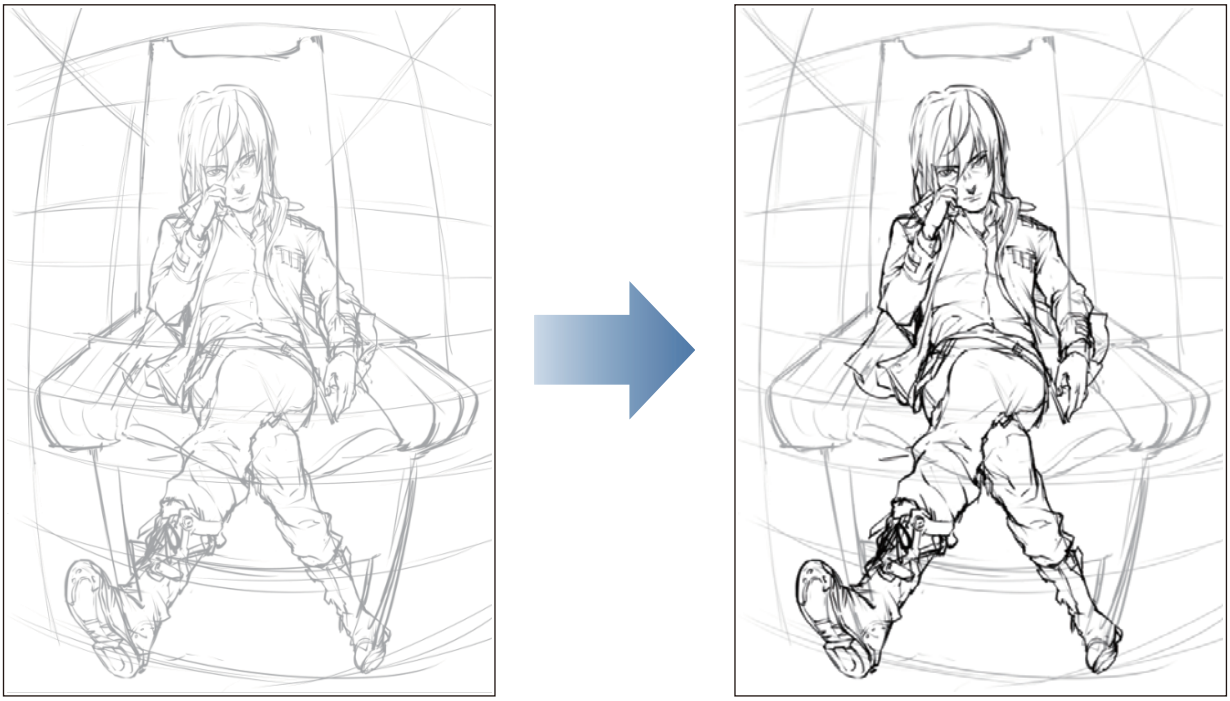
(4) Preview

Previews the image on the canvas.

Binarization

Converts the selected layer into a black and white duotone layer.

Applicable layers	Raster layer (gray) Raster layer (color)



Original image

After binarization

1 Select the layer

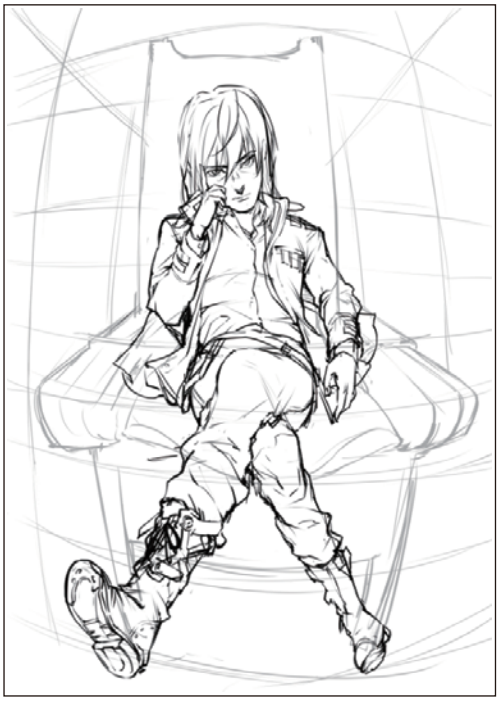
On the [Layer] palette, select a layer. In this example, the [Character draft] layer is selected.

2 Select the command

Select [Edit] menu → [Color correction] → [Binarization]. The [Binarization] dialog box displays. Adjust the black and white balance of the image by moving the slider. If you want to keep the transparency of the original image, turn on [Leave transparency].

3 The correction is complete

The image on the selected layer is now converted into a black and white duotone image.



[Binarization] Dialog Box

(1) Threshold

The color of dots darker than the configured threshold is reduced to black while the color of dots brighter than the configured threshold is reduced to white.

(2) Leave transparency

If turned on, the transparency of the original image is kept.

(3) Preview

Previews the image on the canvas.

Transform

Selecting [Edit] menu → [Transform] allows you to move and transform a selected area within an image.

Scale up/Scale down/Rotate

Zooms in/out or rotates the selected area within an image.

1 Select the layer

On the [Layer] palette, select the layer you want to zoom in/out or rotate.

2 Create a selection

Using a Marquee tool, create a selection.

Memo

If a selection is not created, the image drawn on the selected layer will be the target of zoom in/out or rotate.

3 Select the command

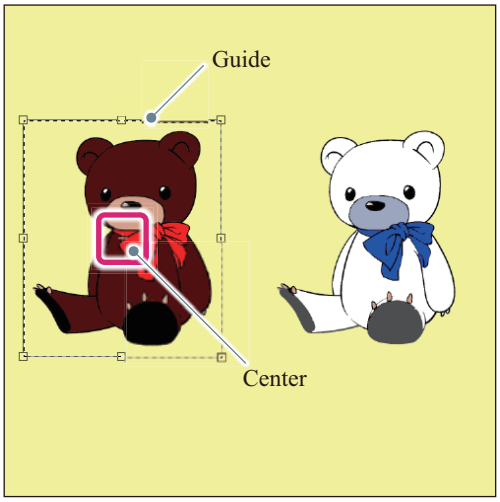
Select [Edit] menu → [Transform] → [Scale up/Scale down/Rotate].

4 Adjust the image orientation, size and the like

A guide is displayed in the selected area. Using the handles and control point of the guide, adjust the image orientation, size and the like.

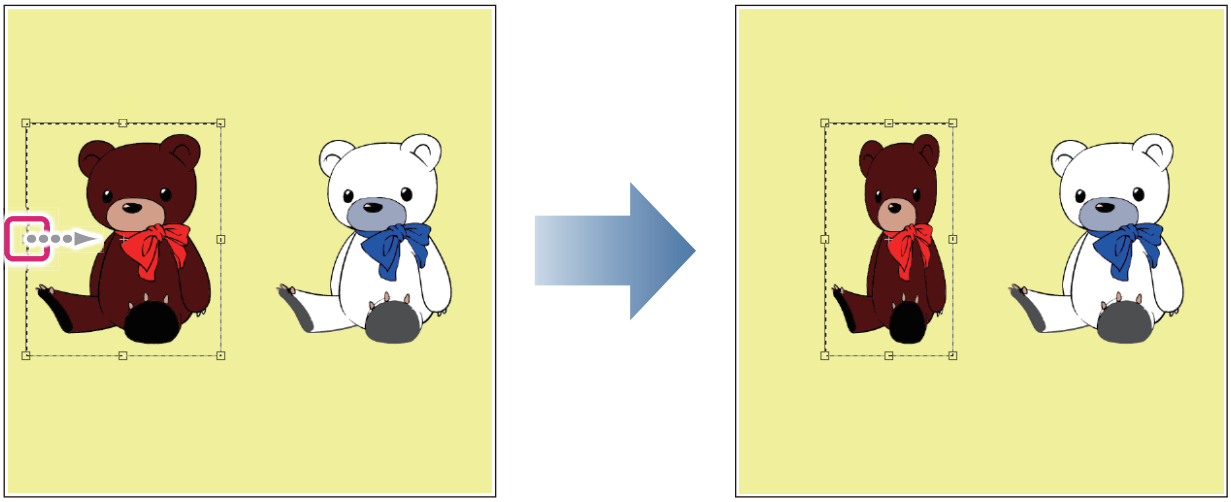
Memo

On the [Tool property] palette, you can configure the color separation line and the like. For details, see "[Tool property] during Scale up/down" .



Scaling up/down an image

Dragging a handle allows you to scale up/down the image.

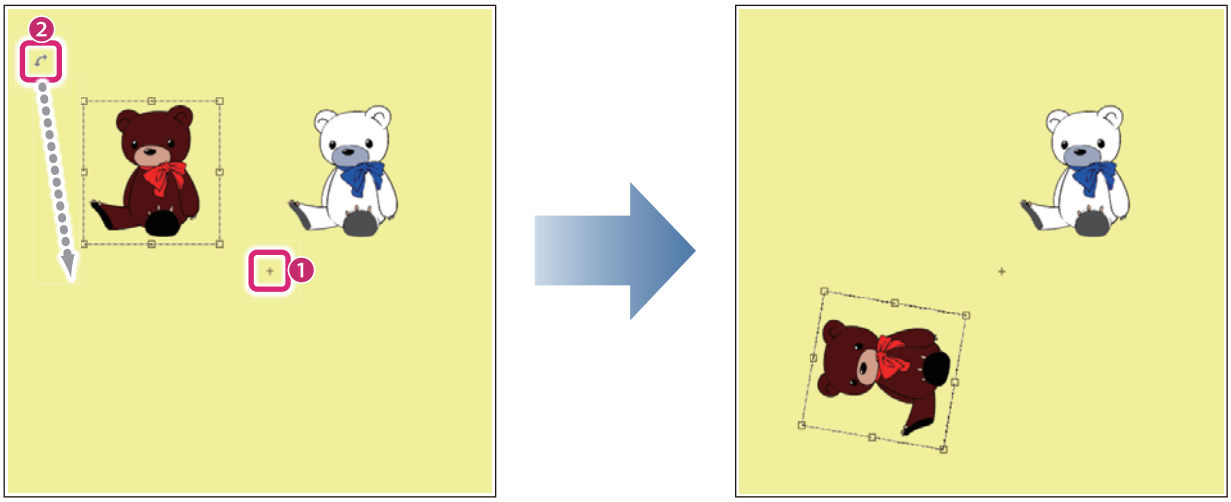


Memo

- **Pressing the [Alt] key while transforming allows you to transform around the center of rotation.**
- **Pressing the [Shift] key while transforming allows you to transform with fixed aspect ratio.**
- **Dragging a handle while holding down the [Ctrl] key allows you to freely transform the image.**

Rotating an Image

Dragging outside the guide allows you to rotate the image.

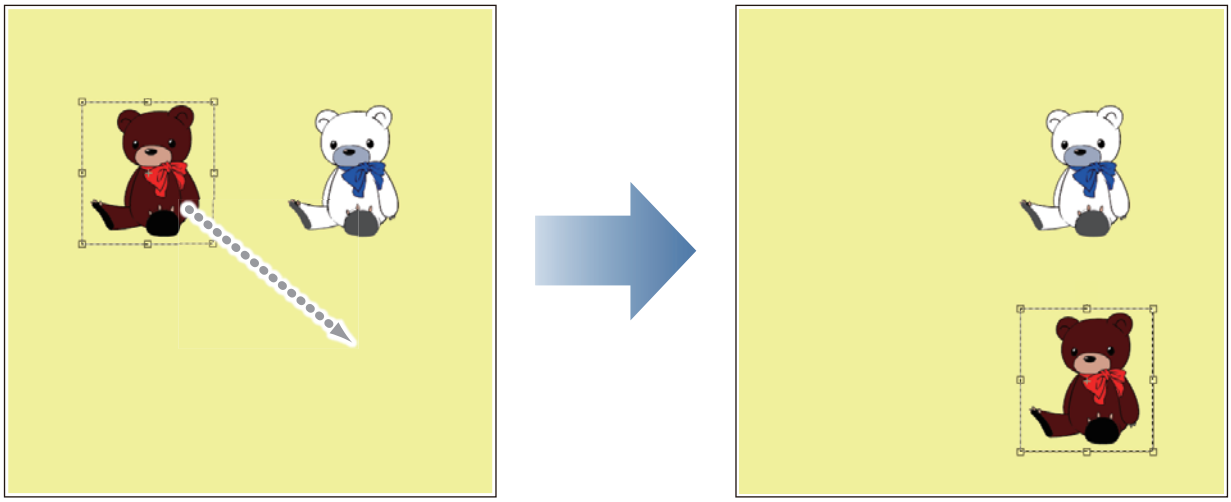


(1) Move its center (+).

(2) Drag outside the guide. The image rotates around the center.

Moving an Image

Dragging inside the guide allows you to move the image.



5 Commit scale up/down or rotate

Double click inside the guide to commit the scale up/down or rotate.

Memo

- **Pressing the [Enter] key also commits the scale up/down or rotate.**
- **Pressing the [ESC] key cancels the scale up/down or rotate.**
- **[OK] and [Cancel] on the [Tool property] palette can also commit and cancel the transform.**

[Tool property] during Scale up/down

During scale up/down, the following operations can be performed from the [Tool property] palette.

Memo

When the transforming operation is recorded in auto action, [Configure auto action] is shown on the [Tool property] palette. For details on the setting items, see the description of "Transform settings" in "Manga Studio 5.0 Tool Setting Guide".

(1) Reset transform

Restores the image being edited to the state before transform.

(2) Flip horizontal

Reverses the image horizontally around the center.

(3) Flip vertical

Reverses the image vertically around the center.

(4) OK

Commits the transform.

(5) Cancel

Cancels the transform.

(6) Center of rotation

Configures the center of rotation of the image.

You can select from [Center], [Top left], [Top right], [Bottom right], [Bottom left], [Top], [Left], [Right], [Bottom] and [Free position].

(7) Change vector width

If turned on, the line width changes in accordance with transform when a vector layer is scaled up/down.

(8) Scaling ratio (width)

Specifies the width of the imported image as a ratio (%) of the original image.

(9) Scaling ratio (height)

Specifies the height of the imported image as a ratio (%) of the original image.

(10) Keep ratio of original image

Scales up/down by keeping the original aspect ratio.

(11) Rotation angle

Specifies the image rotation angle with respect to the horizontal position.

(12) Adjust position

Allows you to automatically adjust the size of an image being transformed. The size is specified by the size of the [Guide] of the image to transform.

Canvas	The size of the [Guide] of the image you will transform will be adjusted to fit the [Canvas].
Bleed border	The size of the [Guide] of the image you will transform will be adjusted to fit the [Bleed].
Cropped border	The size of the [Guide] of the image you will transform will be adjusted to fit the [Cropped border].
Default border	The size of the [Guide] of the image you will transform will be adjusted to fit the [Default border].
Free position	For an image you will transform, the [Guide] size will not to be adjusted.

Memo

- **For details on the [bleed], [cropped border], [default border], see, "Explanation: What Are Default Border, Cropped Border and Bleed Width?" .**
- **When [Bleed], [Cropped border], or [Default border] is selected on a canvas on which [Bleed], [Cropped border], and [Default border] are not configured, the [Grid] size is adjusted so that it is included in [Canvas].**

(13) How to correct

Configures how to blend colors between adjacent pixels.

Smooth	The color separation line is smooth.
Hard outline	The color separation line is sharp.
Emphasize outline *	The outline of a color border is smooth since adjacent pixels blend. The outline is processed in such a way as to be more emphasized than with [Smooth] after a [Rotate] or [Free transform]. However, white noise may appear around the outline depending on the content being transformed.

Free transform

Allows you to freely transform the selected area within an image.

1 Select the layer

On the [Layer] palette, select the layer you want to transform.

2 Create a selection

Using a Marquee tool, create a selection.

Memo

If a selection is not created, the image drawn on the selected layer will be the target of free transform.

3 Select the command

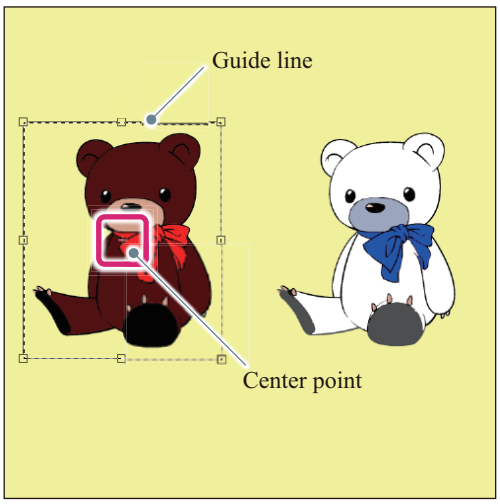
Select [Edit] menu → [Transform] → [Free transform].

4 Adjust the image orientation, size and the like

A guide is displayed in the selected area. Using the handles and control point of the guide, adjust the image shape, orientation and the like.

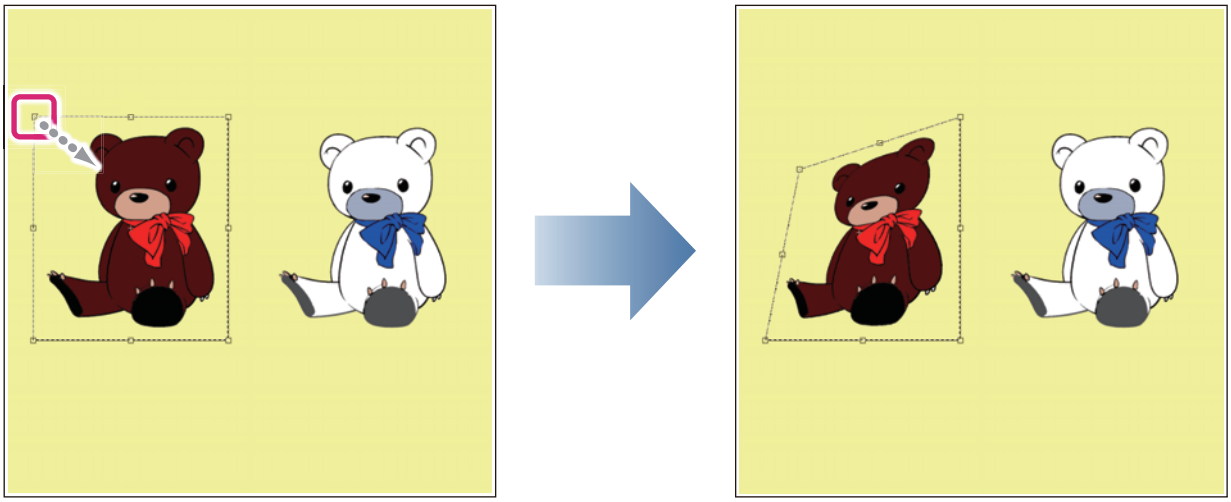
Memo

On the [Tool property] palette, you can configure the color separation line and the like. For details, see "[Tool property] during Free Transform" .



Transforming an Image

Dragging a handle allows you to transform the image.

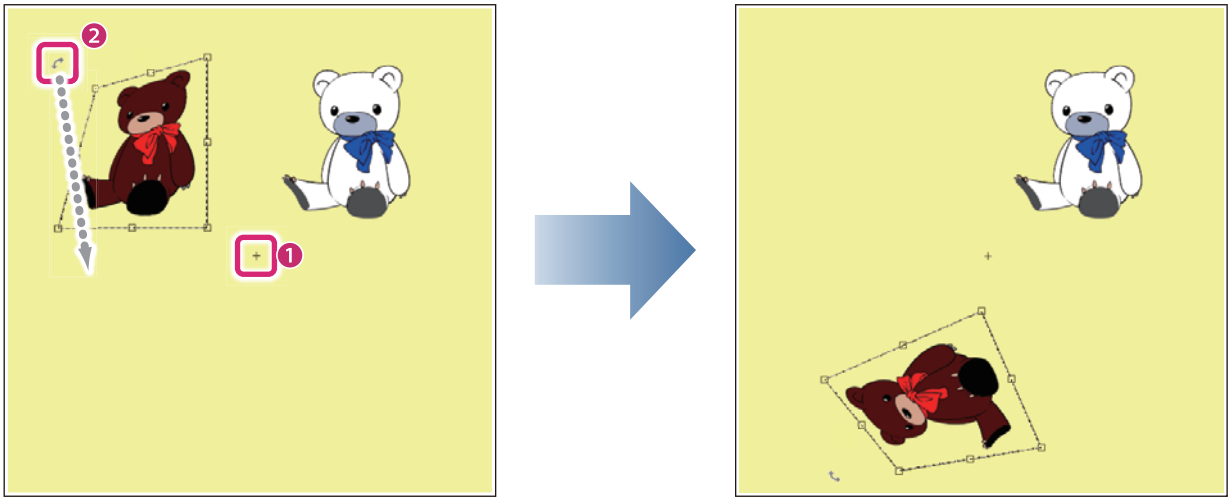


Memo

- **Dragging the handle while holding down the [Shift] key allows you to scale up/down the image.**
- **Dragging the handle while holding down the [Shift] + [Alt] keys allows you to scale up/down the image around its center.**

Rotating an Image

Dragging outside the guide allows you to rotate the image.

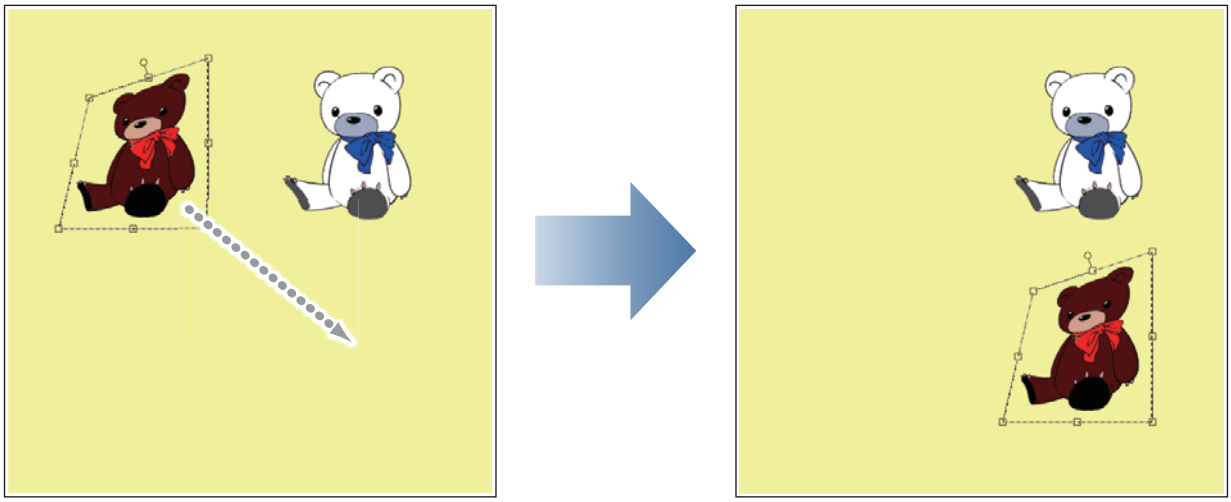


(1) Move its center (+).

(2) Drag outside the guide. The image rotates around the center.

Moving an Image

Dragging inside the guide allows you to move the image.



5 Commit the transform

Double click inside the guide to commit the transform.

Memo

- **Pressing the [Enter] key also commits the transform.**
- **Pressing the [ESC] key cancels the transform.**
- **[OK] and [Cancel] on the [Tool property] palette can also commit and cancel the transform.**

[Tool property] during Free Transform

During free transform, the following operations can be performed from the [Tool property] palette.

Memo

When the transforming operation is recorded in auto action, [Configure auto action] is shown on the [Tool property] palette. For details on the setting items, see the paragraphs on "Transforming settings" in "Manga Studio 5.0 Tool Setting Guide".

(1) Reset transform

Restores the image being edited to the state before transform.

(2) Flip horizontal

Reverses the image horizontally around the center.

(3) Flip vertical

Reverses the image vertically around the center.

(4) OK

Commits the transform.

(5) Cancel

Cancels the transform.

(6) Center of rotation

Configures the center of rotation of the image.

You can select from [Center], [Top left], [Top right], [Bottom right], [Bottom left], [Top], [Left], [Right], [Bottom] and [Free position].

(7) Change vector width

If turned on, the line width changes in accordance with transform when a vector layer is scaled up/down.

(8) Adjust position

Allows you to automatically adjust the size of an image being transformed. The size is specified by the size of the [Guide] of the image to transform.

Canvas	The size of the [Guide] of the image you will transform will be adjusted to fit the [Canvas].
Bleed border	The size of the [Guide] of the image you will transform will be adjusted to fit the [Bleed].
Cropped border	The size of the [Guide] of the image you will transform will be adjusted to fit the [Cropped border].
Default border	The size of the [Guide] of the image you will transform will be adjusted to fit the [Default border].
Free position	For an image you will transform, the [Guide] size will not to be adjusted.

Memo

- **For details on the [bleed], [cropped border], [default border], see, "Explanation: What Are Default Border, Cropped Border and Bleed Width?" .**
- **When [Bleed], [Cropped], or [Default border] is selected on a canvas on which [Bleed], [Cropped], and [Default border] are not configured, the [Grid] size is adjusted so that it is included in [Canvas].**

(9) How to correct

Configures how to blend colors between adjacent pixels.

Smooth	The color separation line is smooth.
Hard outline	The color separation line is sharp.
Emphasize outline *	The outline of a color border is smooth since adjacent pixels blend. The outline is processed in such a way as to be more emphasized than with [Smooth] after a [Rotate] or [Free transform]. However, white noise may appear around the outline depending on the content being transformed.

Flip horizontal

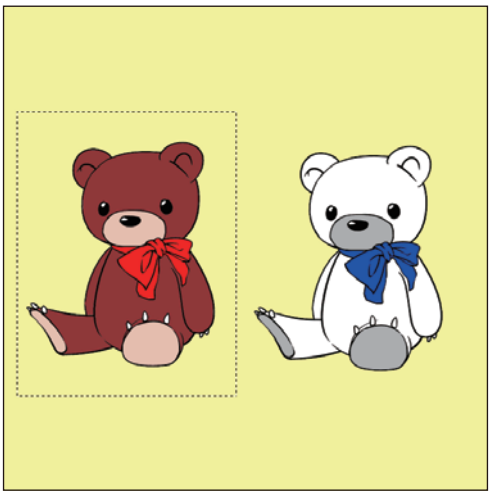
Allows you to horizontally reverse the selected area within an image.

1 Select the layer

On the [Layer] palette, select the layer you want to transform.

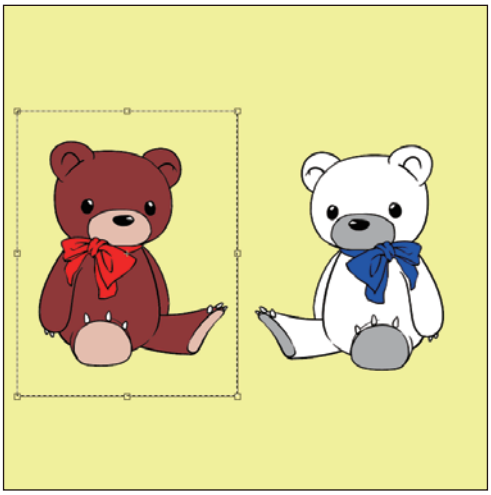
2 Create a selection

Using a Marquee tool, create a selection.



3 Select the command

Select [Edit] menu → [Transform] → [Flip horizontal]. The image in the selected area is reversed horizontally.



4 Commit the transform

Double click inside the guide to commit the transform.

Memo

- **Pressing the [Enter] key also commits the transform.**
- **Pressing the [ESC] key cancels the transform.**
- **[OK] and [Cancel] on the [Tool property] palette can also commit and cancel the transform.**

Tool property during horizontal reversion

During horizontal reversion, the following operations can be performed from the [Tool property] palette.

Memo

When the transforming operation is recorded in auto action, [Configure auto action] is shown on the [Tool property] palette. For details on the setting items, see the description of "Transform settings" in "Manga Studio 5.0 Tool Setting Guide".

(1) Reset transform

Restores the image being edited to the state before transform.

(2) Flip horizontal

Reverses the image horizontally around the center.

(3) Flip vertical

Reverses the image vertically around the center.

(4) OK

Commits the transform.

(5) Cancel

Cancels the transform.

(6) Center of rotation

Configures the center of rotation of the image.

You can select from [Center], [Top left], [Top right], [Bottom right], [Bottom left], [Top], [Left], [Right], [Bottom] and [Free position].

(7) Change vector width

If turned on, the line width changes in accordance with transform when a vector layer is scaled up/down.

(8) Scaling ratio (width)

Specifies the width of the imported image as a ratio (%) of the original image.

(9) Scaling ratio (height)

Specifies the height of the imported image as a ratio (%) of the original image.

(10) Keep ratio of original image

Scales up/down by keeping the original aspect ratio.

(11) Rotation angle

Specifies the image rotation angle with respect to the horizontal position.

(12) Adjust position

Allows you to automatically adjust the size of an image being transformed. The size is specified by the size of the [Guide] of the image to transform.

Canvas	The size of the [Guide] of the image you will transform will be adjusted to fit the [Canvas].
Bleed border	The size of the [Guide] of the image you will transform will be adjusted to fit the [Bleed].
Cropped border	The size of the [Guide] of the image you will transform will be adjusted to fit the [Cropped border].
Default border	The size of the [Guide] of the image you will transform will be adjusted to fit the [Default border].
Free position	For an image you will transform, the [Guide] size will not to be adjusted.

Memo

- **For details on the [bleed], [cropped border], [default border], see, "Explanation: What Are Default Border, Cropped Border and Bleed Width?" .**
- **When [Bleed], [Cropped border], or [Default border] is selected on a canvas on which [Bleed], [Cropped border], and [Default border] are not configured, the [Grid] size is adjusted so that it is included in [Canvas].**

(13) How to correct

Configures how to blend colors between adjacent pixels.

Smooth	The color separation line is smooth.
Hard outline	The color separation line is sharp.
Emphasize outline *	The outline of a color border is smooth since adjacent pixels blend. The outline is processed in such a way as to be more emphasized than with [Smooth] after a [Rotate] or [Free transform]. However, white noise may appear around the outline depending on the content being transformed.

Flip vertical

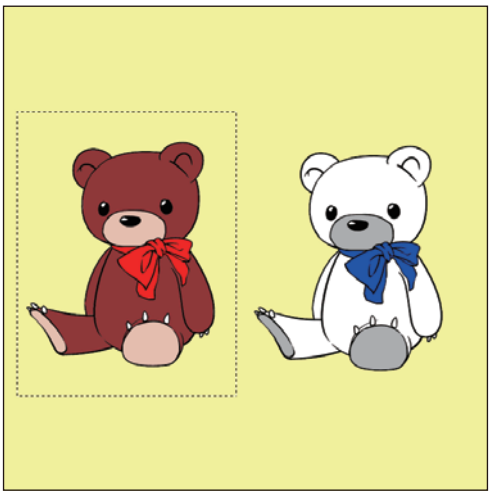
Allows you to vertically reverse the selected area within an image.

1 Select the layer

On the [Layer] palette, select the layer you want to transform.

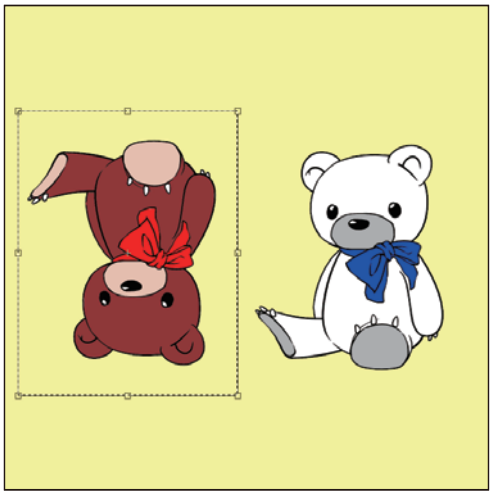
2 Create a selection

Using a Marquee tool, create a selection.



3 Select the command

Select [Edit] menu → [Transform] → [Flip vertical]. The image in the selected area is reversed vertically.



4 Commit the transform

Double click inside the guide to commit the transform.

Memo

- **Pressing the [Enter] key also commits the transform.**
- **Pressing the [ESC] key cancels the transform.**
- **[OK] and [Cancel] on the [Tool property] palette can also commit and cancel the transform.**

Tool property during vertical reversion

During vertical reversion, the following operations can be performed from the [Tool property] palette.

Memo

When the transforming operation is recorded in auto action, [Configure auto action] is shown on the [Tool property] palette. For details on the setting items, see the description of "Transform settings" in "Manga Studio 5.0 Tool Setting Guide".

(1) Reset transform

Restores the image being edited to the state before transform.

(2) Flip horizontal

Reverses the image horizontally around the center.

(3) Flip vertical

Reverses the image vertically around the center.

(4) OK

Commits the transform.

(5) Cancel

Cancels the transform.

(6) Center of rotation

Configures the center of rotation of the image.

You can select from [Center], [Top left], [Top right], [Bottom right], [Bottom left], [Top], [Left], [Right], [Bottom] and [Free position].

(7) Change vector width

If turned on, the line width changes in accordance with transform when a vector layer is scaled up/down.

(8) Scaling ratio (width)

Specifies the width of the imported image as a ratio (%) of the original image.

(9) Scaling ratio (height)

Specifies the height of the imported image as a ratio (%) of the original image.

(10) Keep ratio of original image

Scales up/down by keeping the original aspect ratio.

(11) Rotation angle

Specifies the image rotation angle with respect to the horizontal position.

(12) Adjust position

Allows you to automatically adjust the size of an image being transformed. The size is specified by the size of the [Guide] of the image to transform.

Canvas	The size of the [Guide] of the image you will transform will be adjusted to fit the [Canvas].
Bleed border	The size of the [Guide] of the image you will transform will be adjusted to fit the [Bleed].
Cropped border	The size of the [Guide] of the image you will transform will be adjusted to fit the [Cropped border].
Default border border	The size of the [Guide] of the image you will transform will be adjusted to fit the [Default border].
Free position	For an image you will transform, the [Guide] size will not to be adjusted.

Memo

- **For details on the [bleed], [cropped border], [default border], see, "Explanation: What Are Default Border, Cropped Border and Bleed Width?" .**
- **When [Bleed], [Cropped border], or [Default border] is selected on a canvas on which [Bleed], [Cropped border], and [Default border] are not configured, the [Guide] size is adjusted so that it is included in [Canvas].**

(13) How to correct

Configures how to blend colors between adjacent pixels.

Smooth	The color separation line is smooth.
Hard outline	The color separation line is sharp.
Emphasize outline *	The outline of a color border is smooth since adjacent pixels blend. The outline is processed in such a way as to be more emphasized than with [Smooth] after a [Rotate] or [Free transform]. However, white noise may appear around the outline depending on the content being transformed.

Mesh transformation

Allows you to create guides and handles by dividing a selected area with a lattice to transform an image by portions by dragging the corresponding lattice point.

1 Select the layer

On the [Layer] palette, select the layer you want to transform.

2 Create a selection

Using a Marquee tool, create a selection.

3 Select the command

Select [Edit] menu → [Transform] → [Mesh transformation].

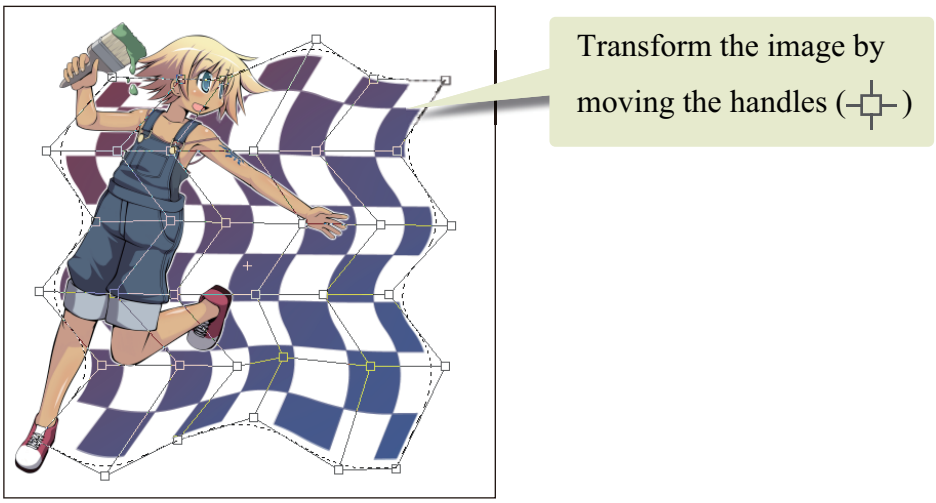
4 Configure the lattice points

On the [Tool property] palette, configure the number of lattice points (handles).

Memo **You can configure up to 10 lattice points.**

5 Transform

In the selected area of the image, as many lattices as you configured will display. Transform by dragging the guides and/or handles.



6 Commit the transform

Double click other than the handles inside the guides to commit the transform.

Memo

- **Pressing the [Enter] key also commits the transform.**
- **Pressing the [ESC] key cancels the transform.**
- **[OK] and [Cancel] on the [Tool property] palette can also commit and cancel the transform.**

[Tool property] during Mesh transformation

During Mesh transformation, the following operations can be performed from the [Tool property] palette.

Memo

When the transforming operation is recorded in auto action, [Configure auto action] is shown on the [Tool property] palette. For details on the setting items, see the description of "Transform settings" in "Manga Studio 5.0 Tool Setting Guide".

(1) Reset transform

Restores the image being edited to the state before transform.

(2) Flip horizontal

Reverses the image horizontally around the center.

(3) Flip vertical

Reverses the image vertically around the center.

(4) OK

Commits the transform.

(5) Cancel

Cancels the transform.

(6) Center of rotation

Specifies the center for transforming the image.

You can select from [Center], [Top left], [Top right], [Bottom right], [Bottom left], [Top], [Left], [Right], [Bottom] and [Free position].

(7) Change vector width

If turned on, the line width changes in accordance with transform when a vector layer is scaled up/down.

(8) H-lattice point number

Specifies the number of horizontal lattice points.

(9) V-lattice point number

Specifies the number of vertical lattice points.

(10) How to correct

Configures how to blend colors between adjacent pixels.

Smooth	The color separation line is smooth.
Hard outline	The color separation line is sharp.

OK

Commits the image transform.

Cancel

Cancels the image transform.

Change image resolution

Allows you to change the resolution of the currently edited canvas.

Important **Executing [Change image resolution] clears [Crop mark] and [Default border].**

1 Select the command

Select [Edit] menu → [Change image resolution].

2 Configure

Configure the [Change image resolution] dialog box that displays.

(1) Configure size, resolution and the like.

(2) Click [OK].

3 The canvas resolution change is complete

The dialog box closes, and the canvas resolution changed.

[Change image resolution] Dialog Box

(1) Width

Configure the paper width.

(2) Height

Configure the paper height.

(3) Resolution

Input the paper resolution. Clicking ▼ allows you to select a resolution from 72 to 1200dpi.

(4) Unit

Select the unit for configuring [Width] and [Height] from [cm], [mm], [in], [px] and [pt].

(5) Scale

Specify the paper size as a ratio of the current paper size.

(6) How to correct

Configures the setting related to color mixing between adjacent pixels.

Smooth	The color separation line is smooth.
Hard outline	The color separation line is sharp.

(7) Fix pixel

Changes the resolution without changing the number of pixels.

Change canvas size

Allows you to change the size of the currently edited canvas.

Important **Executing [Change canvas size] clears [Crop mark] and [Default border].**

Memo **Creating a selection allows you to fit the canvas size to the selected area.**

1 Select the command

Select [Edit] menu → [Change canvas size].

2 Configure

Configure the [Change canvas size] dialog box that displays.

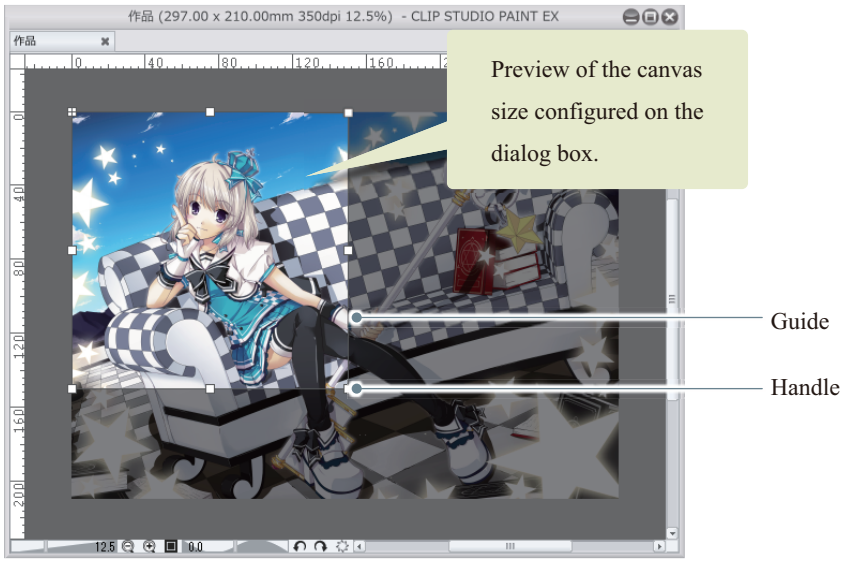
(1) In [Reference point], configure the point of reference for changing the canvas size.

(2) Configure the the canvas size you want to have.

3 Check the canvas

A preview of the settings displays on the canvas.

You can change the position and/or size by dragging the guide and/or handles. ()

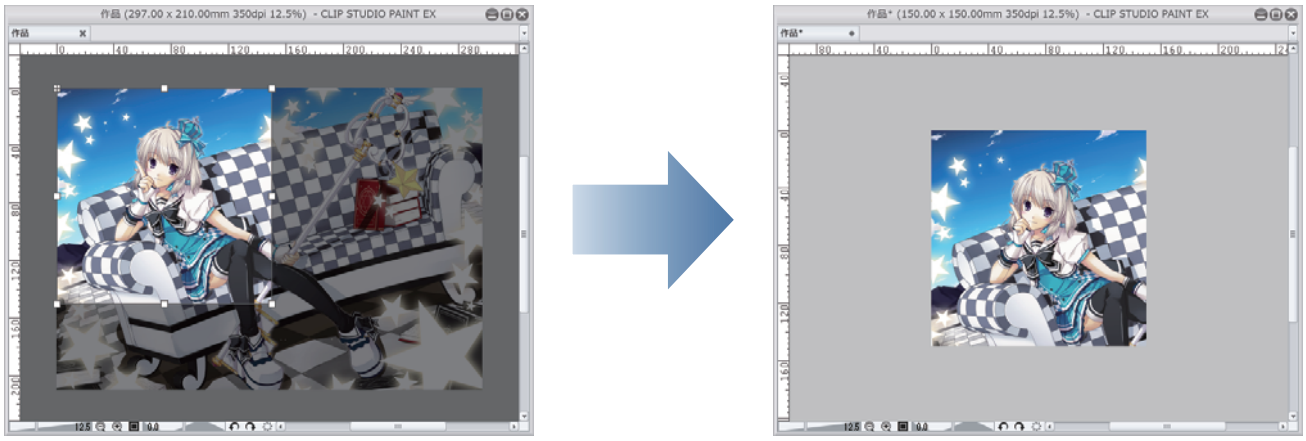


Memo

- **Dragging a handle while holding down the [Shift] key allows you to resize without changing the original aspect ratio.**
- **Dragging a handle while holding down the [Alt] key allows you to resize with center in the [Reference point].**
- **Dragging the [Reference point] in the preview on the canvas allows you to move the point of reference.**

4 The canvas size change is complete

Click [OK] on the [Change canvas size] dialog box. The dialog box closes and the canvas resizing is complete.



[Change canvas size] Dialog Box

(1) Width

Configure the paper width.

(2) Height

Configure the paper height.

(3) Reference point

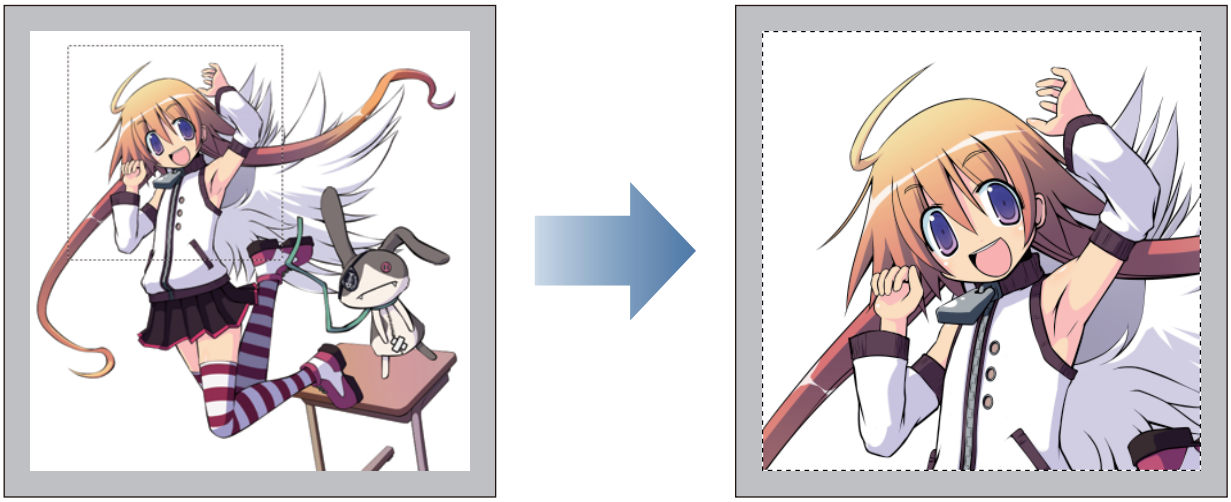
Specify the point of reference for adjusting the canvas size by clicking one of the buttons. If a reference point is specified, the canvas size changes with respect to that point when its width and/or height are changed on the dialog box.

(4) Unit

Select the unit for configuring [Width] and [Height] from [cm], [mm], [in], [px] and [pt].

Crop

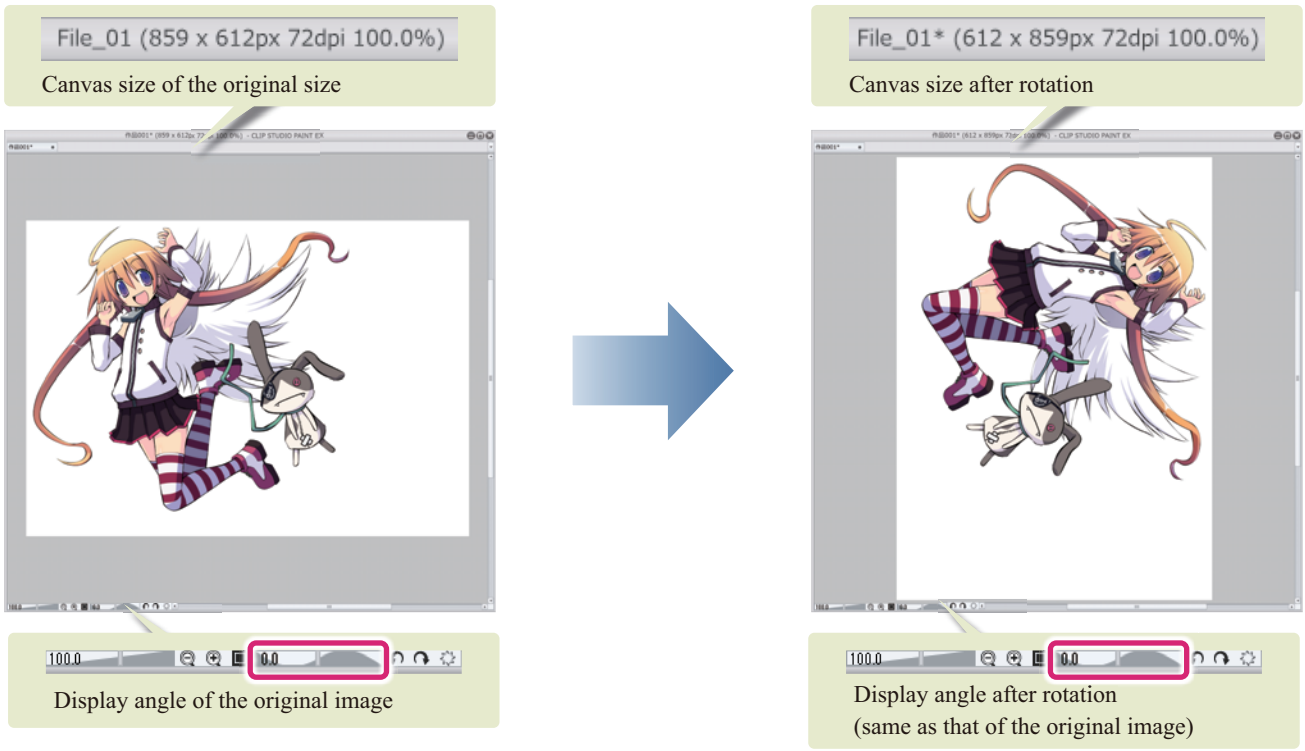
Changes the canvas size so that it matches the selected area.



Rotate/Invert the canvas

Rotates/invert the canvas.

- Does not rotate/invert the view but the whole canvas.
- This status is also retained in printing.
- The canvas size is also changed automatically.



Important

- [Text layer] and [3D layer] are converted to [Raster layer] at the time of rotation/reversion.
- In the case of [Vector layer], the brush patterns and spraying expressions may change after rotation/reversion.
- The expression of the dots of [Tone] may change after rotation/reversion.

Rotate by 90 degrees clockwise

Rotates the canvas clockwise by 90 degrees.

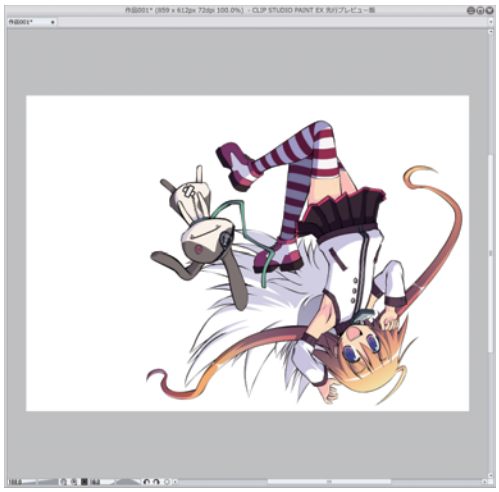
Original image

Rotate clockwise by 90 degrees

Rotate 180

Rotates the canvas by 180 degrees.

Original image



Rotate by 180 degrees

Rotate by 90 degrees counterclockwise

Rotates the canvas counterclockwise by 90 degrees.

Original image

Rotate clockwise by 90 degrees

Flip horizontal

Reverses the canvas horizontally (mirror image).

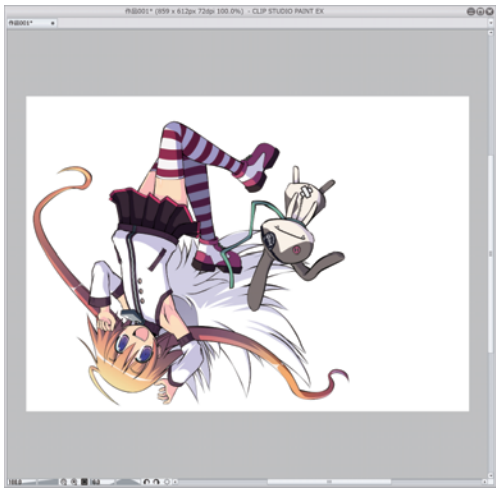
Original image

Flip Horizontal

Flip vertical

Reverses the canvas vertically (upside-down mirror image).

Original image



Flip Vertical

Canvas properties

Allows you to configure the basic expression color and number of lines. Selecting the menu item opens the [Canvas properties] dialog box. Configure the expression color and number of lines on the dialog box.

Memo

The configured content will be used as default settings when creating a new layer, for example.

Important

The expression color [Plain color] configured with Ver.1.2.1 or earlier is converted into the following [Basic expression color] and [Drawing color].

- **Basic expression color: Gray**
- **Drawing color: Only black button ON**

(1) Basic expression color

Allows you to configure the basic expression color. Select from [Color], [Gray] and [Monochrome].

(2) Drawing color

Configures the drawing color for [Gray] and [Monochrome]. Configure the color with the [Black] and [White] buttons.

Gray

The drawing color is configured as follows with the [Black] and [White] buttons.

Only black button ON	The drawing color is configured as a gradation from black to transparent.
Only white button ON	The drawing color is configured as a gradation from white to transparent.
Both black and white buttons ON	The drawing color is configured as a gradation from black to white.

Monochrome

The drawing color is configured as follows with the [Black] and [White] buttons.

Only black button ON	The drawing color is configured as black or transparent.
Only white button ON	The drawing color is configured as white or transparent.
Both black and white buttons ON	The drawing color is configured as black, white or transparent.

Memo

For details on expression color and drawing color, see "Explanation: Expression Color and Drawing Color" .

(3) Number of basic lines

Specify the number of tone (halftone dot) lines. The larger the value, the smaller will be the halftone dot.

Clear memory

Clears the content stored in the application memory, such as the operation history for [History].

Story Menu [EX]

The [Story] menu is for managing manga or comic works composed of two or more pages. You can manage how to display a page file, add and delete pages, manage manga or comic story information, and so on.

Open page *

Opens the page file selected on the [Page manager] window after closing the page file you were editing.

Memo

- **When there are two or more tabs open, the page file selected on the [Page manager] window opens after the page file you were editing closes. The tabs of page files that were not being edited remain open.**
- **If [Auto save when switching page] is turned on in [Preferences] → [Story], switching pages automatically saves and closes the page file you were editing. For details, see "Preferences [Windows]" → "File" .**

Open page with new tab *

Opens the page file selected on the [Page manager] window with the page file you were editing kept open.

Memo

Selecting the same page as that of the page file being edited opens the same page file in another tab.

To Start Page

Opens the page file of the first page.

Previous page

Opens the page file of the previous page.

Next page

Opens the page file of the next page.

Last page

Opens the page file of the last page.

Add page

Adds a new page file to the next page of the selected page file.

Memo

- **When a 2-page spread is present after the selected page, page files for two pages are added.**
- **Adding a page to a single-page file displays the [Create page management folder] dialog box. For details on how to configure the dialog box, see "Saving Files Created from a Single-page File" .**

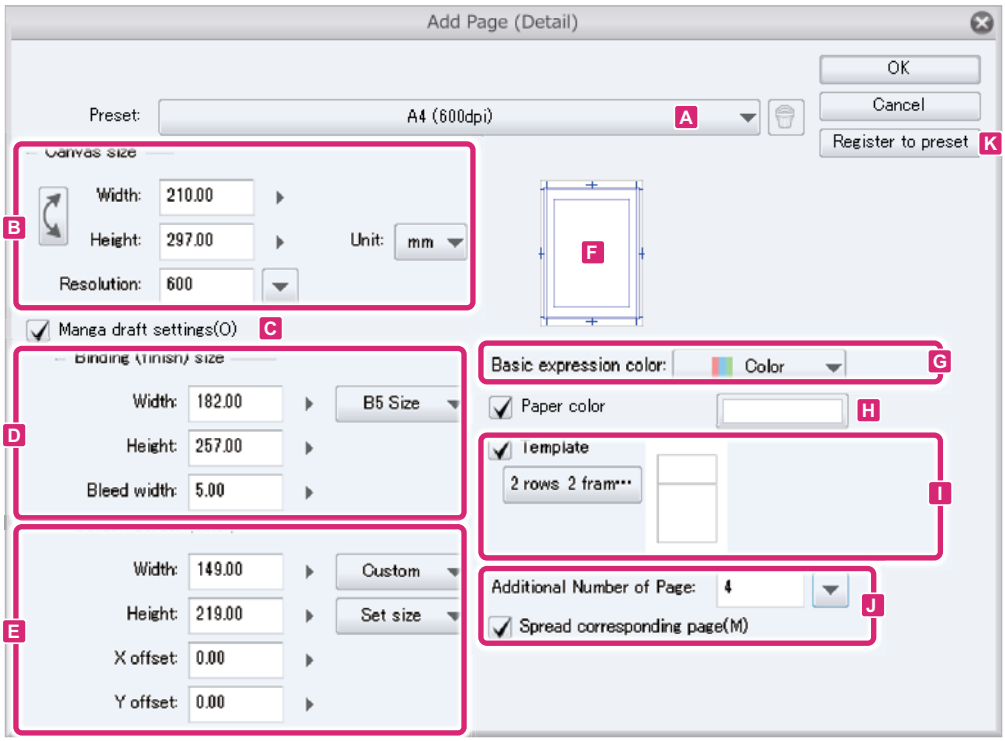
Add page (Detail)

Selecting the menu item displays the [Add page (Detail)] dialog box. Configuring the page to create on the dialog adds a new page file to the next page of the selected page file.

Memo

- **When a 2-page spread is present after the selected page, page files for two pages are added.**
- **Adding a page to a single-page file displays the [Create page management folder] dialog box. For details on how to configure the dialog box, see "Saving Files Created from a Single-page File" .**

[Add page (Detail)] Dialog Box



A. Preset

Allows you to select settings such as [Canvas size], [Final size] and [Bleed/Default border] from a list.

When custom settings exist, the icon on the right side allows you to delete a setting.

Memo

- **Use [Final size] to configure the size when bound in a book.**
- **[Custom] can be selected only when the default size settings have been changed.**

B. Canvas size

Configure the canvas size.

Memo

- When [Manga draft settings] is turned off, [Canvas size] becomes the final size.
- When [Manga draft settings] is turned on, [Binding (finish) size] becomes the final size when bound in a book.

(1) Swap width/height

Swaps the width and height of the canvas.

(2) Width

Configure the width of the canvas.

(3) Height

Configure the height of the canvas.

(4) Resolution

Input the resolution of the canvas. Clicking ▼ allows you to select a resolution from 72 to 1200dpi.

(5) Default size (Canvas size)

Allows you to select a [Width] and [Height] for the canvas from default sizes.

Important

This item displays when [Manga draft settings] is turned off.

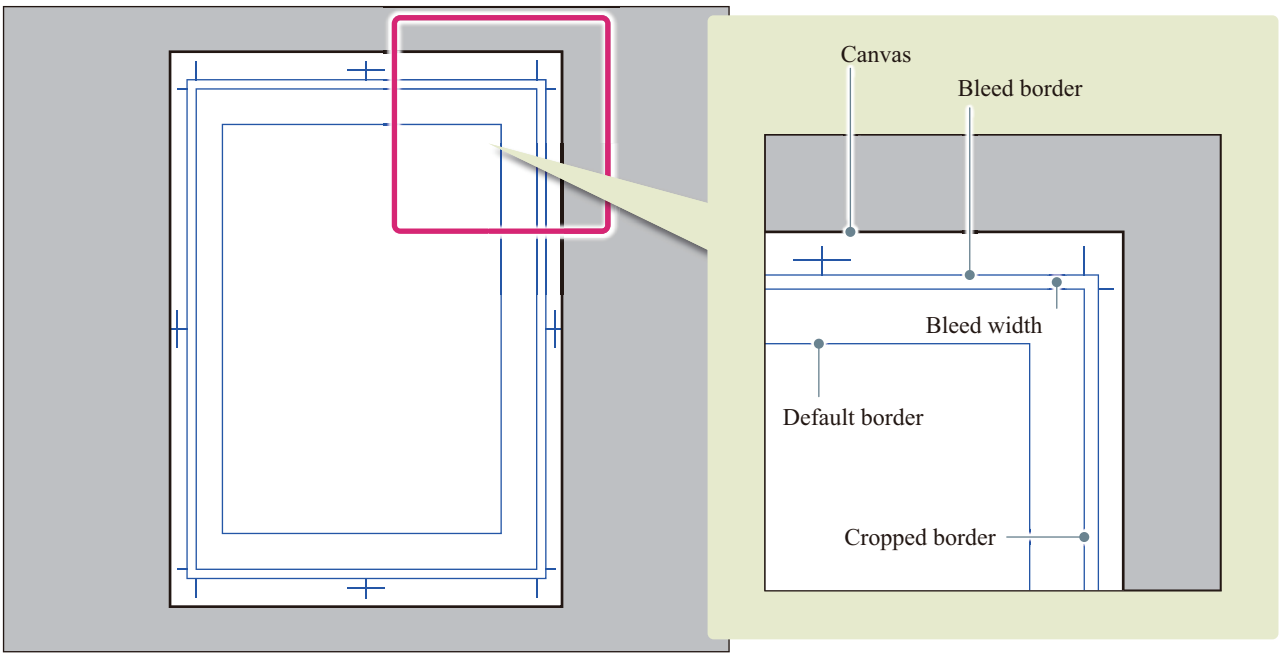
(6) Unit

Select a unit for [Width] and [Height] from [cm], [mm], [in], [px] and [pt].

C. Manga draft settings

Turning on this item creates [Crop mark], [Default border(inner)], [Cropped border] and [Bleed] on the canvas.

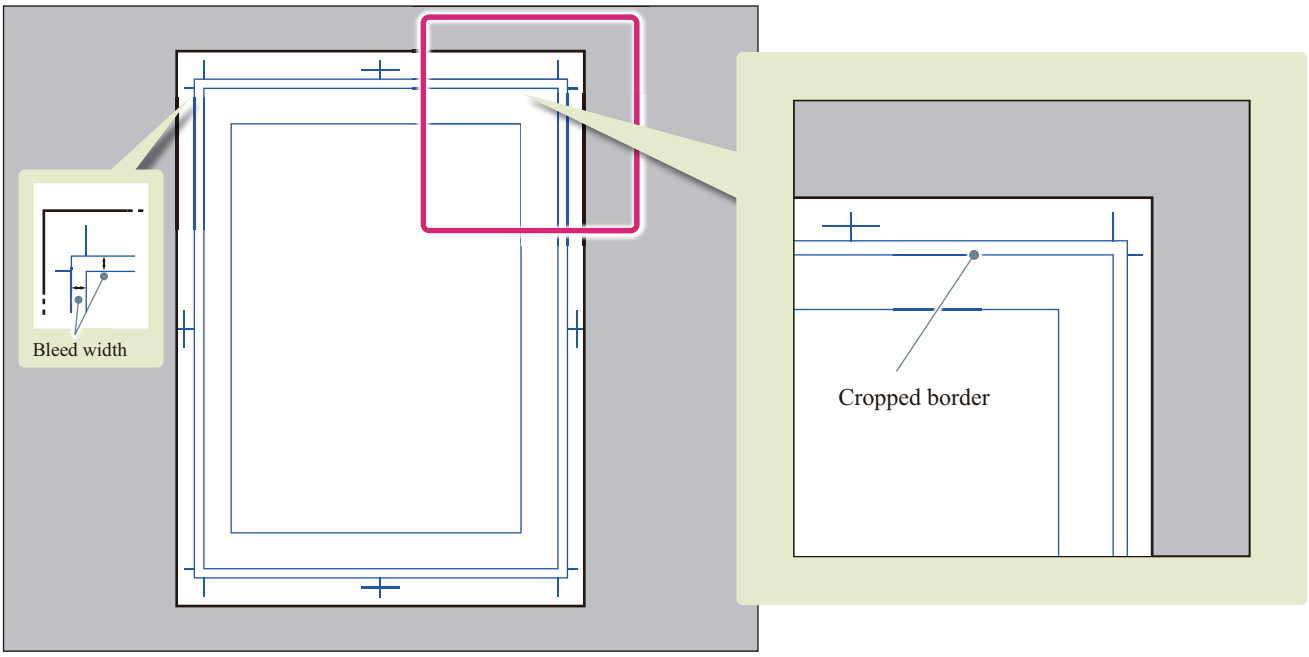
Configuring [Bleed], [Default border] and [Canvas] displays guides on the canvas.



D. Manga draft settings → Binding (finish) size

Configure the line at which the edge of the pages will be trimmed for binding after printing. Drawings within these dimensions are printed. Also configure the extra margin to deal with misaligned [Cropped border] lines when trimming the edges of the pages.

Important **This item displays when [Manga draft settings] is turned on.**



(1) Width

Horizontal length to print.

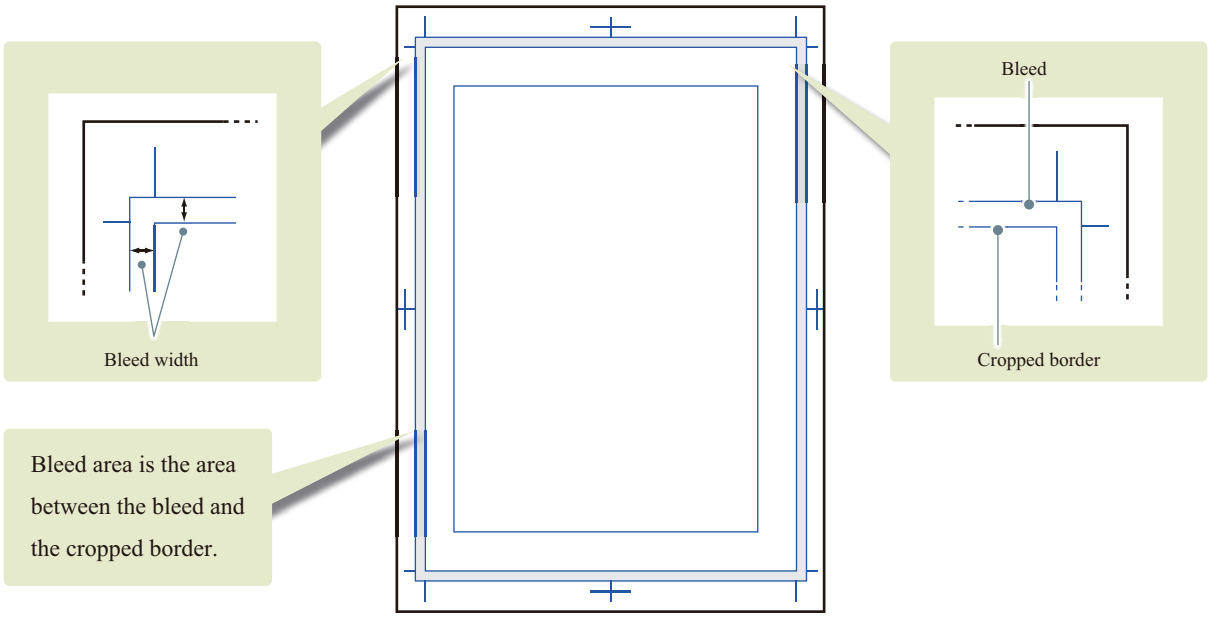
(2) Height

Vertical length to print.

(3) Bleed width

Configure the extra margin to deal with misaligned [Cropped border] lines when trimming the edges of the pages. Draw up to the bleed area to print to the edge of the pages.

The area between the bleed (the first border from the edge) and the cropped border (the second border from the edge) is the bleed area.



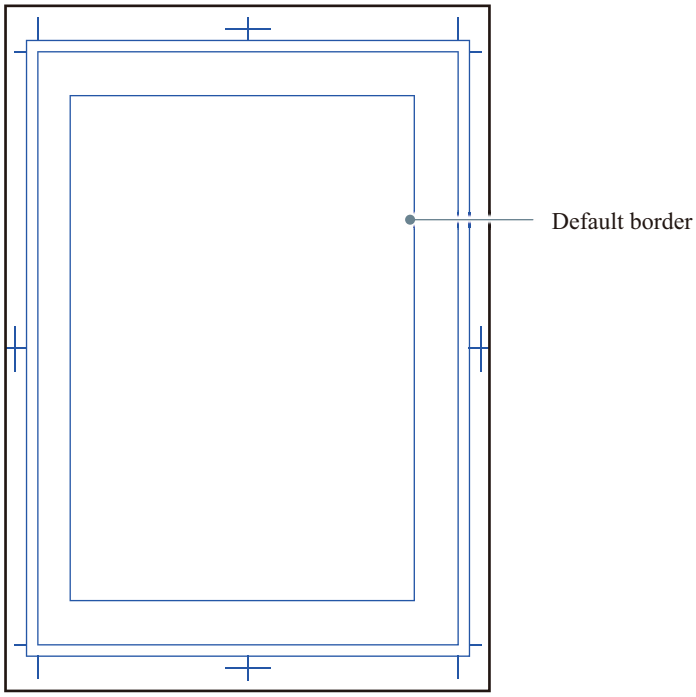
(4) Default size (Cropped border)

Allows you to select a [Width] and [Height] for the cropped border from default sizes.

E. Manga draft settings → Default border (inner)

Configure the border that will be the reference for laying out the frames. There are two ways of specifying the default border: by size and position, or by margin.

Important **This item displays when [Manga draft settings] is turned on.**



(1) Default size (Default border)

Allows you to select a [Width] and [Height] for the default border from default sizes.

(2) How to specify default border

Configures how to specify the size and position of the default border. Displayed items vary depending on the content configured in [Default border settings].

Set size	Configures the default border based on the size and position.
Set margin	Configures the default border based on the distance from the left, right, top and bottom edges of the paper.

(3) Default border settings

Configure the size and position of the default border. Displayed items vary depending on the item selected in [How to specify default border].

Set size

Configures the default border based on the size and position.

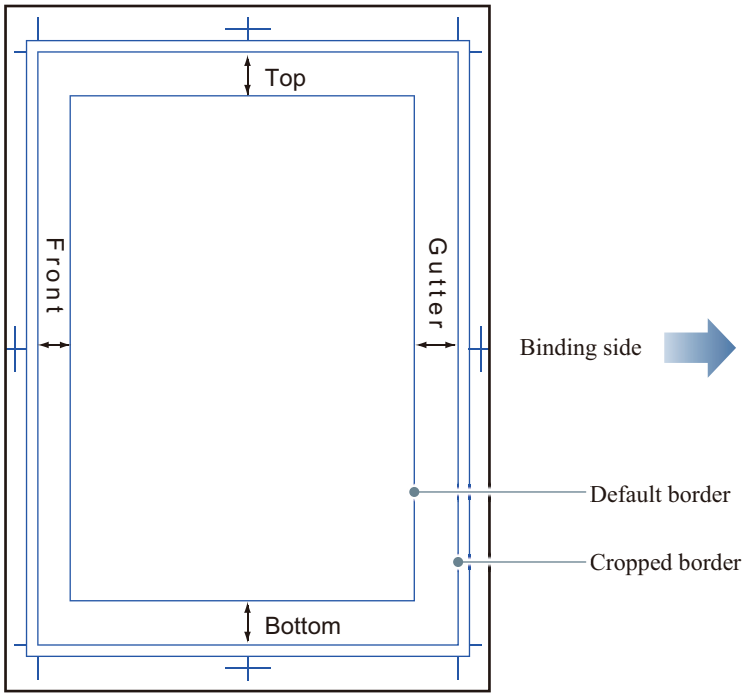
Width	Width of the [Default border].
Height	Length of the [Default border].
X offset	Horizontal position of the [Default border].
Y offset	Vertical position of the [Default border].

Memo

- **When [X offset] is 0, that means the [Default border] is centrally located with respect to the [Cropped border] on the left and right.**
- **When [Y offset] is 0, that means the [Default border] is centrally located with respect to the [Cropped border] at the top and bottom.**

Set margin

Configures the default border based on the distance from the left, right, top and bottom edges of the cropped border.



Top	Specifies the upper side of the [Default border] as the distance from the top of the cropped border.
Bottom	Specifies the lower side of the [Default border] as the distance from the bottom of the cropped border.
Gutter	Specifies the right or left side of the [Default border] as the distance from the "direction of the binding point".
Front	Specifies the right or left side of the [Default border] as the distance from the "outer direction (opposite of binding point)".

F. Additional number of page

Configure the number of pages to add.

(1) Number of pages

Input the number of pages to create in the input field. Clicking ▼ allows you to select the number of pages from [1], [2], [4], [8], [12], [16], [24] and [32].

(2) Spread corresponding page

When turned on, creates a 2-page spread from a pair of left and right pages.

G. Preview

Previews the configured [Cropped border], [Bleed/Default border], [Paper color], and so on.

H. Paper color

You can configure a color for the [Paper] layer. Clicking the color indicator displays the dialog box for selecting a color. Specifying a color configures it to the [Paper] layer.

Memo

- **[Paper] layer is a monochrome layer at the bottom of the data. Hiding the [Paper] layer displays transparent areas of the image on the canvas in a checkered pattern.**
- **The [Paper] layer color can be changed afterwards. To change the [Paper] layer color, double click the [Paper] layer on the [Layer] palette to display the dialog box for selecting a color.**

I. Basic expression color/Number of basic lines

Allows you to configure the basic expression color and the like.

Important

The expression color [Plain color] configured with Ver.1.2.1 or earlier is converted into the following [Basic expression color] and [Drawing color].

- **Basic expression color: Gray**
- **Drawing color: Only black button ON**

(1) Basic expression color

Allows you to configure the basic expression color. Select from [Color], [Gray] and [Monochrome].

(2) Drawing color

Configures the drawing color for [Gray] and [Monochrome]. Configure the color with the [Black] and [White] buttons.

Gray

The drawing color is configured as follows with the [Black] and [White] buttons.

Only black button ON	The drawing color is configured as a gradation from black to transparent.
Only white button ON	The drawing color is configured as a gradation from white to transparent.
Both black and white buttons ON	The drawing color is configured as a gradation from black to white.

Monochrome

The drawing color is configured as follows with the [Black] and [White] buttons.

Only black button ON	The drawing color is configured as black or transparent.
Only white button ON	The drawing color is configured as white or transparent.
Both black and white buttons ON	The drawing color is configured as black, white or transparent.

Memo **For details on expression color and drawing color, see "Explanation: Expression Color and Drawing Color" .**

(3) Number of basic lines

Specify the number of tone (halftone dot) lines. The larger the value, the smaller will be the halftone dot.

J. Template

Allows you to create a page file with an imported template.

Selecting the check box and clicking the button opens the [Template] dialog box. Specify the template to import to the page file in the dialog box.

(1) Template

When turned on, allows you to specify a template.

(2) Specify template

Clicking this button opens the [Template] dialog box. Specify the template to import to the page file in the dialog box.

[Template] Dialog Box

(1) Search box	Allows you to input a keyword and search for a template.
(2) Tag list	A list of tags assigned to materials displayed as buttons. Clicking a button displays the included materials in [Material list].
(3) Material list	Template materials are displayed as a list. Click to select the material to import.
(4) Thumbnail [Large]	Shows the large thumbnails of the materials shown in [Material list].
(5) Thumbnail [Small]	Shows the small thumbnails of the materials shown in [Material list].
(6) Thumbnail [Detail]	Shows the thumbnails as well as information of the materials shown in [Material list].

Memo **Templates can be added from [Edit] menu → [Register layer as template material]. For details, see "Register layer as template material" .**

K. Register to preset

Registers the content configured in the dialog box as [Preset].

Clicking the button opens the [Register to preset] dialog box. On the dialog box, configure the [Preset name] and [Items to be included in Preset].

[Register to preset] Dialog Box

(1) Preset name

Input a name for the [Preset] to register.

(2) Items to be included in Preset

The content of the selected items will be registered in [Preset].

Memo **[Width], [Height], [Unit] and [Manga draft settings] are always registered.**

Import page

Adds a specified image file as page file to the next page of the selected page file.

File formats that can be imported are: Manga Studio 5.0 format (extension: lip), IllustStudio document (extension: xpg), Manga Studio 4.0 page file (extension: cpg), BMP, JPEG, PNG, TIFF, Targa, Adobe Photoshop Document (extension: psd) and Adobe Photoshop Big Document (extension: psb).

Memo

- **When a 2-page spread is present after the selected page, the page file of the imported image and a blank page file are added.**
- **Importing an image file to a single-page file displays the [Create page management folder] dialog box. For details on how to configure the dialog box, see "Saving Files Created from a Single-page File" .**

Duplicate page

Copies the selected page file to the next page.

Memo

- **When a 2-page spread is present after the selected page, the page file is copied to the next page of the last one.**
- **Copying a page from a single-page file displays the [Create page management folder] dialog box. For details on how to configure the dialog box, see "Saving Files Created from a Single-page File" .**

Delete page

Deletes the selected page file.

Memo

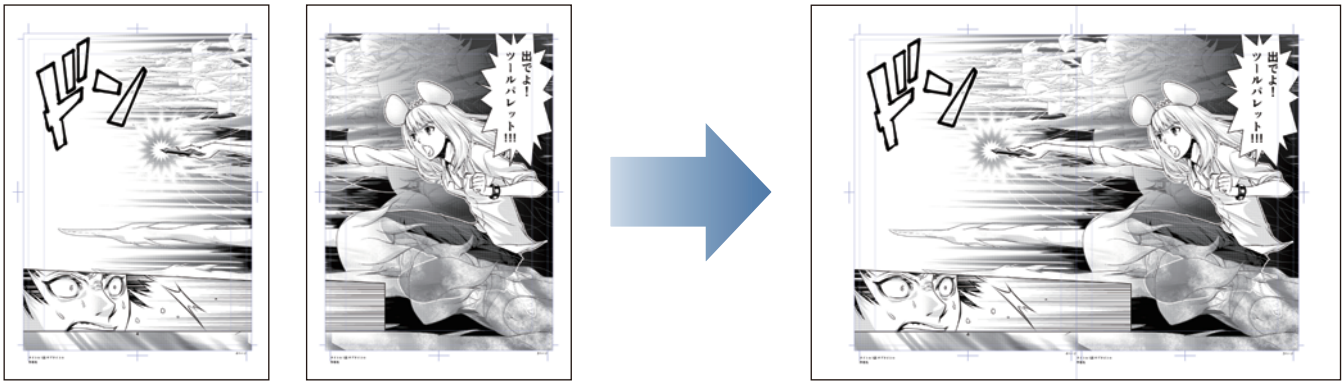
To delete multiple pages at once, select them on the [Page manager] window.
To select multiple pages on the [Page manager] window, perform as follows:

- **To select multiple pages, click the pages while holding down the [Ctrl] key.**
- **To select a group of consecutive pages, click the pages while holding the down the [Shift] key.**

Combine pages

Combines the selected page and the next into one image, as a 2-page spread.

Selecting the menu item displays a confirmation dialog box. Clicking [OK] displays the [Combine pages] dialog box where you will be able to configure the position of the crop mark between pages and the like.



Two pages of original

Combined into one for a 2-page spread

[Combine pages] Dialog Box

(1) Align crop mark

When turned off, combines the pages by matching the paper edges.

When turned on, combines the pages by matching the positions of the cropped border. The positions of the cropped border on the left and right pages can be adjusted in [Space].

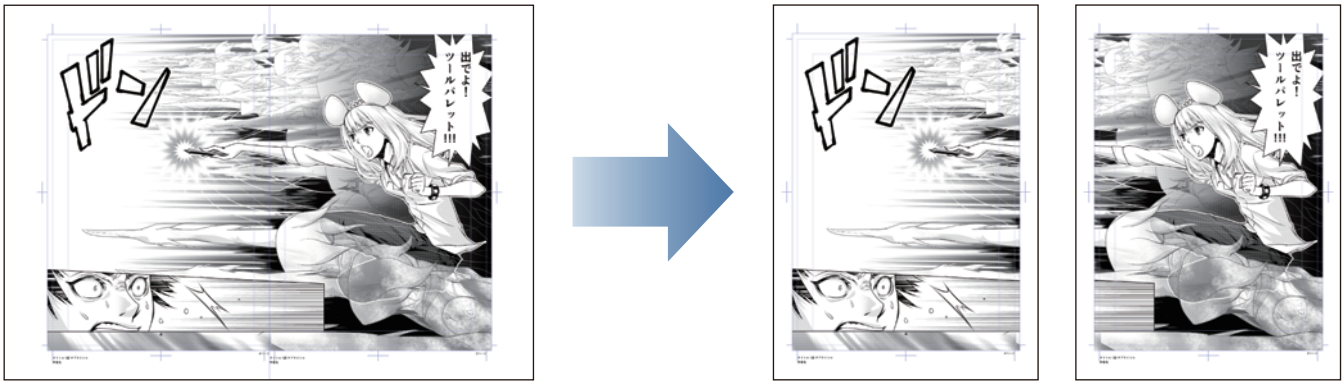
(2) Delete layer with no drawing

When turned on, deletes layers with nothing on it at the time of combining the images.

Split pages

Reverses the pages combined into one 2-page spread to two single pages.

Selecting the menu item displays a confirmation dialog box. Clicking [OK] displays the [Change to single] dialog box and deletes blank layers when dividing the image.



2-page spread original　　Divided into two single pages

[Change to single] Dialog Box

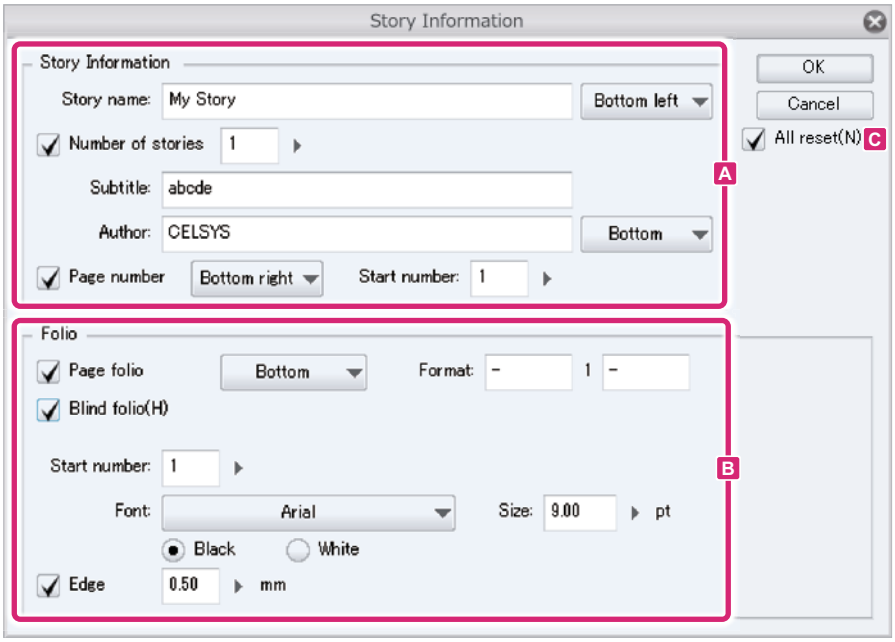
(1) Delete layer with no drawing

When turned on, deletes layers with nothing on it at the time of dividing the images.

Set Story Information

Selecting the menu item opens the [Story Information] dialog box. Configure the manga or comic story informations, page number and like on the dialog box.

[Story Information] Dialog Box



A. Story information

Input [Story name], [Number of story], [Subtitle], [Author], [Page number], and so on. The input content is displayed outside the bleed (in the non-printable area). Input is unnecessary when there is no relevant information.

(1) Story name

Input a title for the manga or comic book. A pull down menu allows you to configure the display position of [Story name].

(2) Number of story

Input the number of story for the manga or comic book.

(3) Subtitle

Input the subtitle for the manga or comic book.

(4) Author

Input the name of the author(s), club and the like. A pull down menu allows you to configure the display position of [Author].

(5) Page number

Input the starting page number. The pull down menu on the left side allows you to configure the display position of [Page number].

B. Folio

Configure the actual page number when the manga or comic is bound in a book.

(1) Page folio

When turned on, page numbers are indicated inside the page. A pull down menu allows you to configure the display position of the page number.

(2) Format

Configure the text to be added before and/or after the page number, if any. Input the text in the fields on the left and right, respectively.

(3) Blind folio

When turned on, hidden page numbers are indicated in the lower part of the gutter (the side where the book is bound).

(4) Start number

Input the starting page number.

(5) Font

Select the font to use for the page number.

(6) Font size

Configure the font size for the page number.

(7) Color

Configure the color for the page number. Configure either [Black] or [White].

(8) Edge

When turned on, an edge will be added to the page number text. The input field on the right allows you to configure the thickness of the edge.

C. All reset

When turned on, the position, size, edge settings and the like for the [Story information] and pagination for all pages adjusted individually with tools and palettes are ignored and changed to the values configured on the [Story Information] dialog box.

Binding Point/Start page

Selecting the menu item displays the [Binding Point/Start page] dialog box. Configure the binding point and orientation of the start page on the dialog box.

(1) Binding point

Selects the direction in which to bind the book. Select either [Left Binding] or [Right Binding].

(2) Start page

Configures the orientation of the start page in the book.

- When the start page is a left page, select [Left].
- When the start page is a right page, select [Right].

Page manager

Selecting the menu item displays the [Page manager] window.

Page manager window

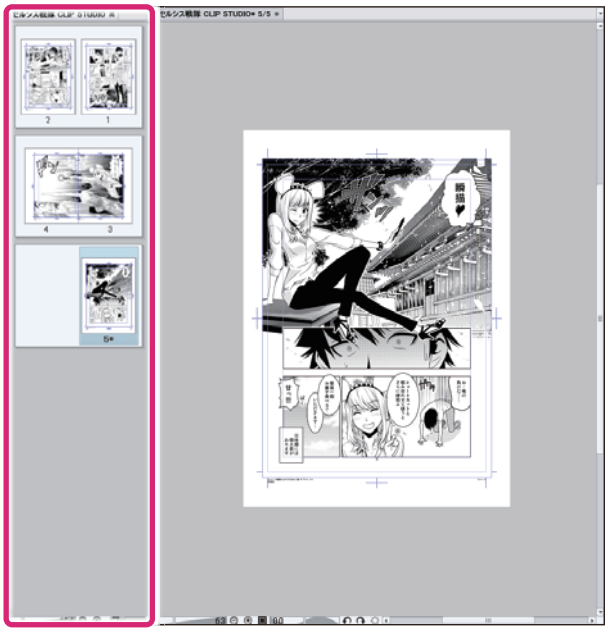
Memo

For details on the [Page manager] window, see "Page manager Window" .

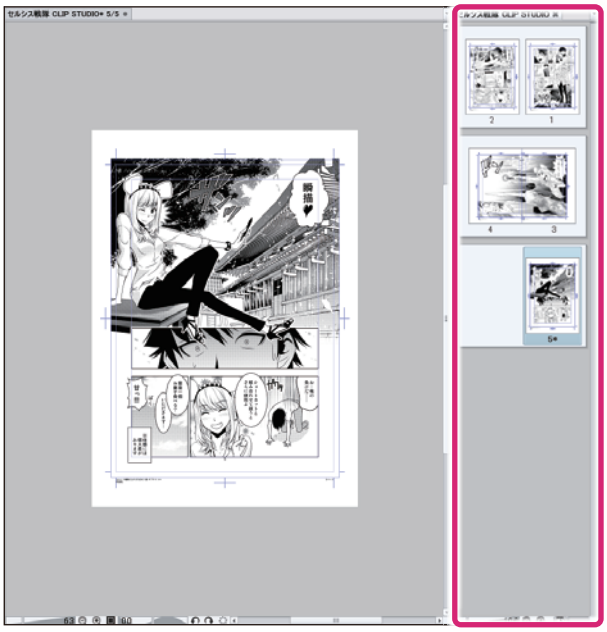
Page manager layout

Allows you to configure the layout of the [Page manager] window. Available layout options are: [Tab], [Left], [Right], [Top] and [Bottom].

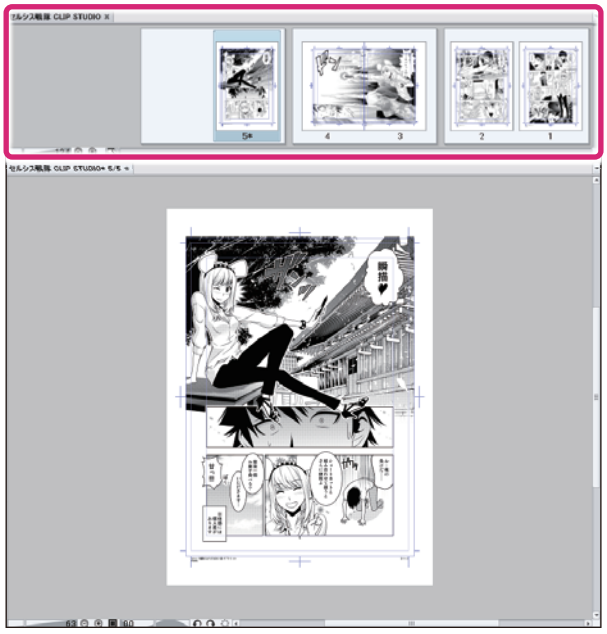
Page manager window layout: Tab



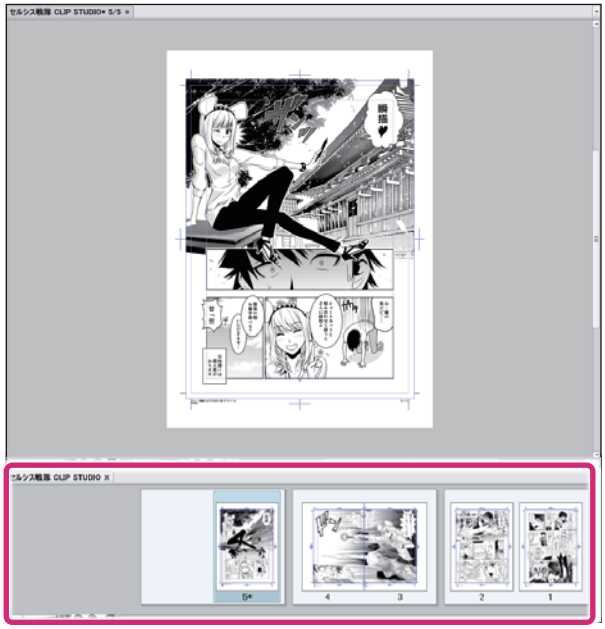
Page manager window layout: Left



Page manager window layout: Right



Page manager window layout: Up



Page manager window layout: Bottom

Batch process *

Allows you to run a batch process on a page file. Operations you can perform using a batch process are as follows.

Batch process	Run menu commands/auto actions for a specified page file in one go.
Batch import	Specify multiple image files and import them to each page file as a layer.
Batch export	Specify the export destination, range of pages to export, file format and the like on the [Batch export] dialog box, and export the files of multiple pages at once.
Continuous scanning	Use a commercial scanner to scan images continuously and import them to each page file as layers.

Batch process

Allows you to run menu commands/auto actions for a specified page file in one go.

Memo

- **Batch process can be executed either when the page file is open individually or displayed on the [Page manager] window.**
- **Batch process can also be executed only on a selected page file by selecting the page on the [Page manager] window and specifying it as the only target in [Processing object] on the [Batch process] dialog box. For details, see "Processing object" .**

1 Select the command

Select [Story] menu → [Batch process]. The [Batch process] dialog box opens.

2 Configure the content of the process

Configure the content of the process, target of the process and action(s) after processing on the dialog box/

(1) Select the processes to run in [Execute].

(2) Specify the page file on which you want to run the processes in [Processing object].

(3) Configure the action(s) after processing in [Process after execution].

(4) Click [OK].

3 The batch process runs

Closing the dialog box runs the batch process on the specified page file(s).

Memo

For batch processes configured in the dialog box, a dialog box titled [Next batch process] dialog box may display.

- **To run the same process as before, select [Continue].**
- **To run the batch process by displaying the dialog box, select [Display settings dialog box to continue].**
- **When not running any batch process, select [Skip].**

[Batch process] Dialog Box

A. Execute

Select the processes you want to run.

(1) Process category

Select the category of the processes you want to run.

- When you want run menu commands, select [Main menu].
- When you want to play auto actions, select [Auto action].

(2) List of processes

Select the processes you want to run.

Memo

Items on lower levels can be displayed/hidden by the following operation:

- **Click ▼.**
- **Double click the item name.**

B. Processing object

Specify the page file(s) on which you want to run.

All pages	The processes are run on all page files.
Selected page	The processes are run on the page files selected on the [Page manager] window. When there are individually open page files, the processes are run on the displayed page file.
Opened canvas	The processes are run on the open page files.
Current canvas	The processes are run on the displayed page file.

C. Process after execution

Configure how to save and close the page file(s) after the batch process is complete.

(1) How to save

Configure how to save the page file(s) after the batch process is complete.

Close without saving	Closes the page file(s) on which the batch process has been run without saving.
Close with overwriting	Closes the page file(s) on which the batch process has been run after saving over.
Close with szving with a different name	Closes the page file(s) on which the batch process has been run after saving as different file(s).

(2) Not close opened canvas

When turned on, configures not to close already open page file(s) after saving.

Batch import

Allows you to specify multiple image files and import them to each page file as a layer.

1 Create a page file

Create a page file for importing image files, or open an already-created page file.

Memo

- **For details on how to create a page file, see "Explanation: Page Management [EX]"→ "Creating a Page File" .**
- **You can execute [Batch import] also when a single page file is open. In this case, [Create page management folder] dialog box will open after you specify the page from which to start importing. [Page management folder] has to be created on the dialog box.**

2 Select the command

Select [Story] menu → [Batch import].

3 Specify an image file

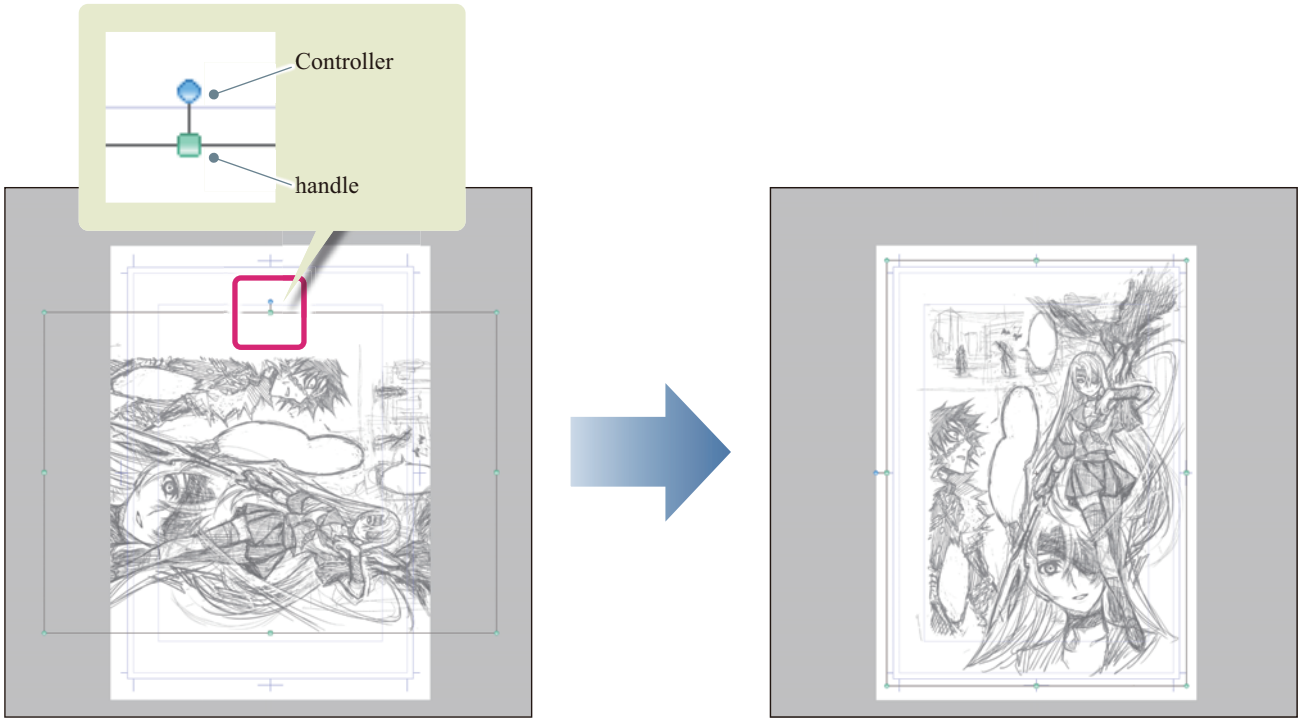
The [Open file] dialog box displays. Specify an image to import.

Memo

- **Acceptable image file formats are: BMP, JPEG, PNG, TIFF, Targa, Adobe Photoshop Document (extension: psd), and Adobe Photoshop Big Document (extension: psb).**
- **Image files can be imported even when the number of image files exceeds the number of pages. When importing files, pages are automatically added and the images are imported.**

4 Specify the image orientation, size, position, and the start page

[Batch import] dialog box opens. The canvas previews images on the start page. Specify the orientation, size and position of the image on the canvas and specify the start page on the dialog box.



(1) Using [Controller] and [Handle], adjust the image orientation, size and position.

Memo

- **Dragging the [Controller] allows you to rotate the image.**
- **Dragging a [Handle] allows you to adjust the image size.**
- **Dragging an image allows you to adjust the image position.**

(2) Specify the first page to import in [Start page] of the [Batch import] dialog box.

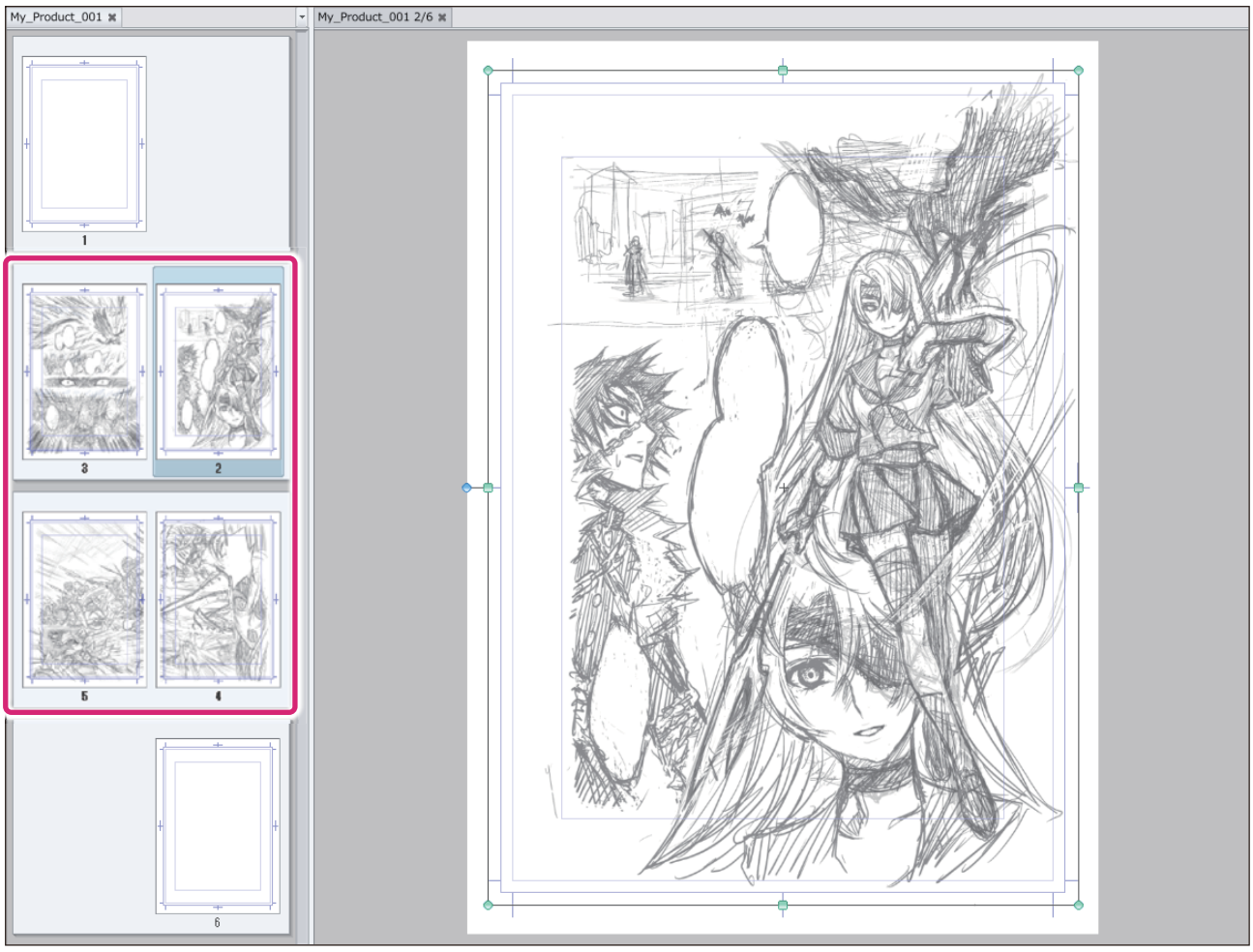
(3) Click [OK].

Memo

[Create page management folder] dialog box opens if images are imported when a single page file is open. [Page management folder] has to be created on the dialog box. For details, see "[Create page management folder] dialog box" .

5 The images are imported

The images are imported to each page file as specified when the dialog box is closed.



[Batch import] dialog box

(1) Start page

Specify the page from which to start importing images.

- Selecting [Page 1] imports images from the first page.
- Selecting [Specified page] imports images from the page specified by [Page number].

(2) Import as raster layers

When turned on, allows you to import images as [Raster layers].

(3) Configure as draft layer

When turned on, the layer of imported images is configured as [Draft layer].

[Create page management folder] dialog box

(1) Save folder

Specifies the location where the management folder will be created. Clicking [Browse] allows you to specify the location.

(2) Management folder

Input a name for the management folder.

(3) Management file

Displays the management file name (extension: cmc).

Batch export

Selecting the menu item opens the [Batch export] dialog box.

Specifying the folder to save, the range of pages to save and the like on the dialog box allows you to save the data at once. The page files can be saved as images in BMP, JPEG, PNG, TIFF, Targa, Adobe Photoshop Document (extension: psd) or Adobe Photoshop Big Document (extension: psb) format.

1 Select the command

Select [Story] menu → [Batch export]. The [Batch export] dialog box displays.

2 Configure the file format, export destination and the like

Configure the export destination, file format, file name, range of pages to export and the like on the dialog box.

(1) Click [Browse] to specify the [Export folder].

(2) Specify the [File format].

(3) Input a name for the file to export in [Name].

(4) Specify the range of pages to export in [Page range].

(5) Click [OK].

Memo

The file name of each exported page file will be [Name] followed by a sequential number.

3 Configure the export settings

The [Export settings] dialog box displays. Configure settings related to the file(s) to export.

(1) Configure settings related to the file(s) to export.

(2) Click [OK].

Memo

The [Export settings] dialog box for batch export is the same as that displayed when [File] menu [Export (Layered)], but with restrictions in some functions.

- **For details on the restrictions, see "Batch export specifications and restrictions" .**
- **For details on how to configure the [Export settings] dialog box, see "Export (Single Layer)" .**

4 The file(s) is(are) exported

The [Export settings] dialog box closes and the file(s) exported as configured.

[Export settings] Dialog Box

(1) Export folder

Click [Reference] to specify the file(s) destination folder.

(2) File format

Specify the file format for the image(s) to export. Available formats are: BMP, JPEG, PNG, TIFF, Targa, Adobe Photoshop Document (extension: psd) and Adobe Photoshop Big Document (extension: psb).

(3) Combine and export image

When turned on, the layers are integrated when exporting the image(s).

Important

[Combine and export image] is available only when exporting in Adobe Photoshop Document (extension: psd) or Adobe Photoshop Big Document (extension: psb) format. When exporting in BMP, JPEG, PNG, TIFF or Targa, images are exported with the layers integrated.

(4) Name

Input a name for the file(s) to export.

Memo

The file name of each exported page file will be [Name] followed by a sequential number.

(5) Page range

Specify the range of pages to export.

(6) Export spread separately

When turned on, 2-page spreads are split into two single pages for export.

Batch export specifications and restrictions

The following describes the specifications and restrictions when exporting images with [Story] menu → [Batch export].

Common restrictions

Rendering results cannot be previewed.

Restrictions on Adobe Photoshop Document and Adobe Photoshop Big Document formats

The following restrictions apply when batch exporting in Adobe Photoshop Document (extension: psd) or Adobe Photoshop Big Document (extension: psb) format.

- When [Combine and export image] on the [Batch export] dialog box is turned off, images are exported with the layer structure kept intact, but [Export spread separately] cannot be configured.
- [Output range] cannot be specified on the [psd export settings] or [psb export settings] dialog box.

Continuous scanning

Use a commercial scanner to scan images continuously and import them to each page file as layers.

1 Create a page file

Create a page file for importing image files, or open an already-created page file.

Memo

- **For details on how to create a page file, see "Explanation: Page Management [EX]"→ "Creating a Page File" .**
- **You can also execute [Continuous scanning] even when a single page file is open. In this case, [Create page management folder] dialog box will open after you specify a page from which to start importing. [Page management folder] has to be created on the dialog box.**

2 Select the command

Select [Story] menu → [Continuous scanning].

3 Scan

The scanner driver is displayed. Configure the driver and scan continuously.

Memo

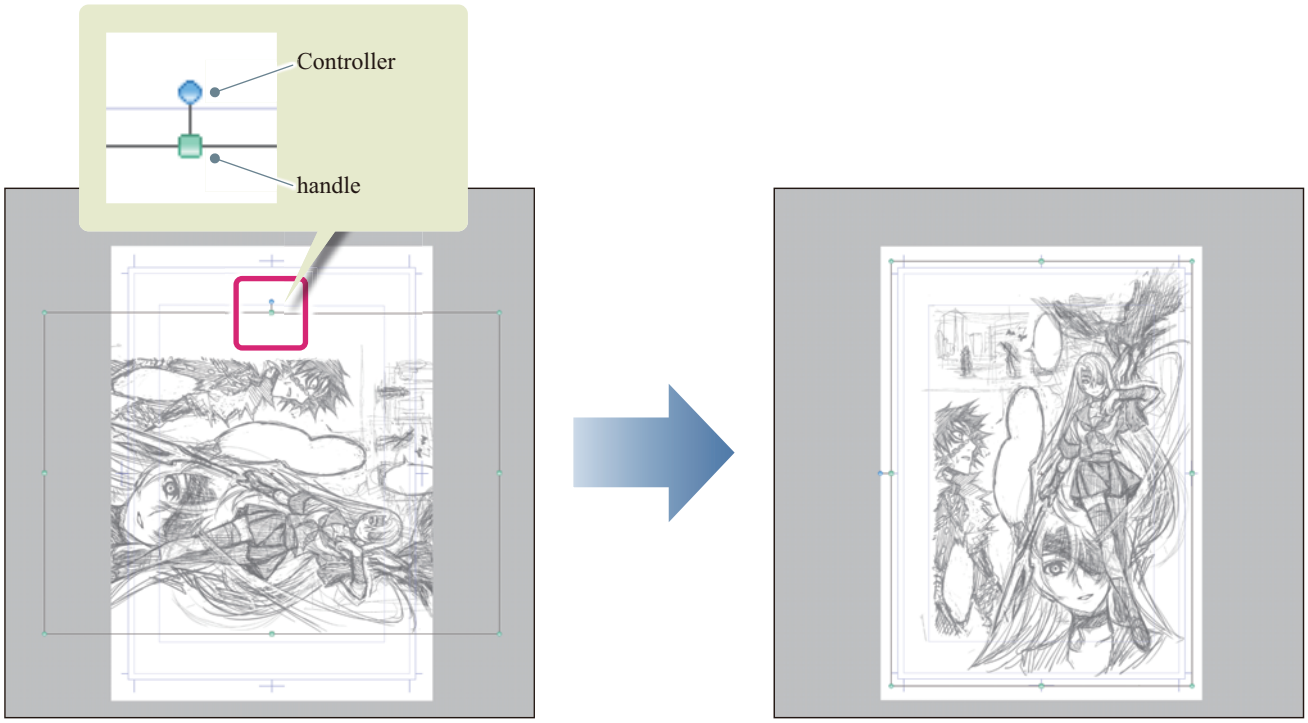
The procedure to scan varies according to the scanner in use. See the instruction manual of the scanner as well.

4 Exit the driver

Exit the driver when the scan has been completed.

5 Specify the image orientation, size, position, and the start page

[Continuous scanning] dialog box opens. The canvas previews images on the start page. Specify the orientation, size and position of the image on the canvas and specify the start page on the dialog box.



(1) Using [Controller] and [Handle], adjust the image orientation, size and position.

Memo

- **Dragging the [Controller] allows you to rotate the image.**
- **Dragging a [Handle] allows you to adjust the image size.**
- **Dragging an image allows you to adjust the image position.**

(2) Specify the start page to import on [Start page] of the [Continuous scanning] dialog box.

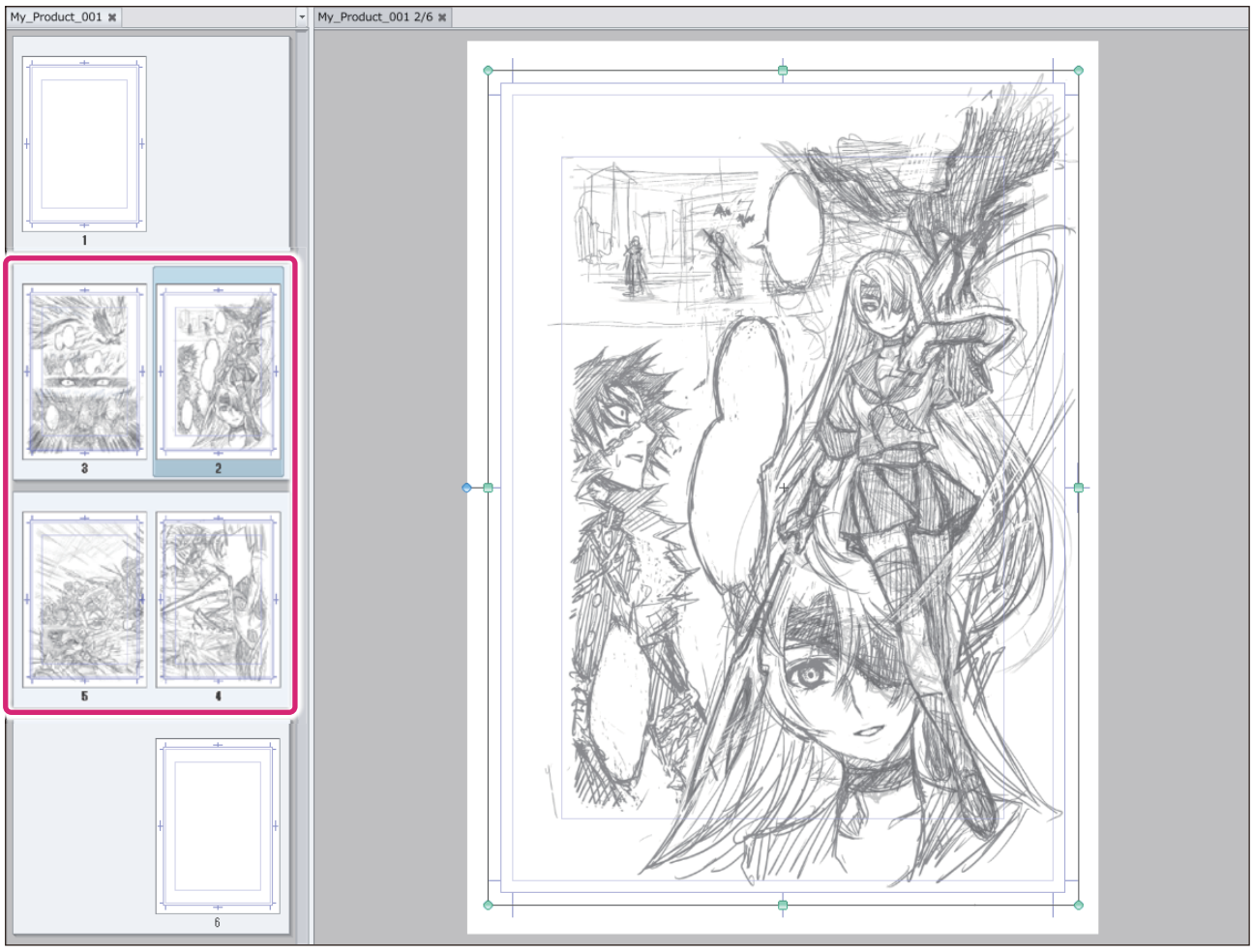
(3) Click [OK].

Memo

[Create page management folder] dialog box opens if images are imported when a single page file is open. [Page management folder] has to be created on the dialog box. For details, see "[Create page management folder] dialog box" .

6 The images are imported

The images are imported to each page file as specified when the dialog box is closed.



[Continuous scanning] dialog box

(1) Start page

Specify the page from which to start importing images.

- Selecting [Page 1] imports images from the first page.
- Selecting [Specified page] imports images from the page specified by [Page number].

(2) Import as raster layers

When turned on, allows you to import an image as [Raster layers].

(3) Configure as draft layer

When turned on, the layer of an imported image is configured as [Draft layer].

[Create page management folder] dialog box

(1) Save folder

Specifies the location where the management folder will be created. Clicking [Browse] allows you to specify the location.

(2) Management folder

Input a name for the management folder.

(3) Management file

Displays the management file name (extension: cmc).

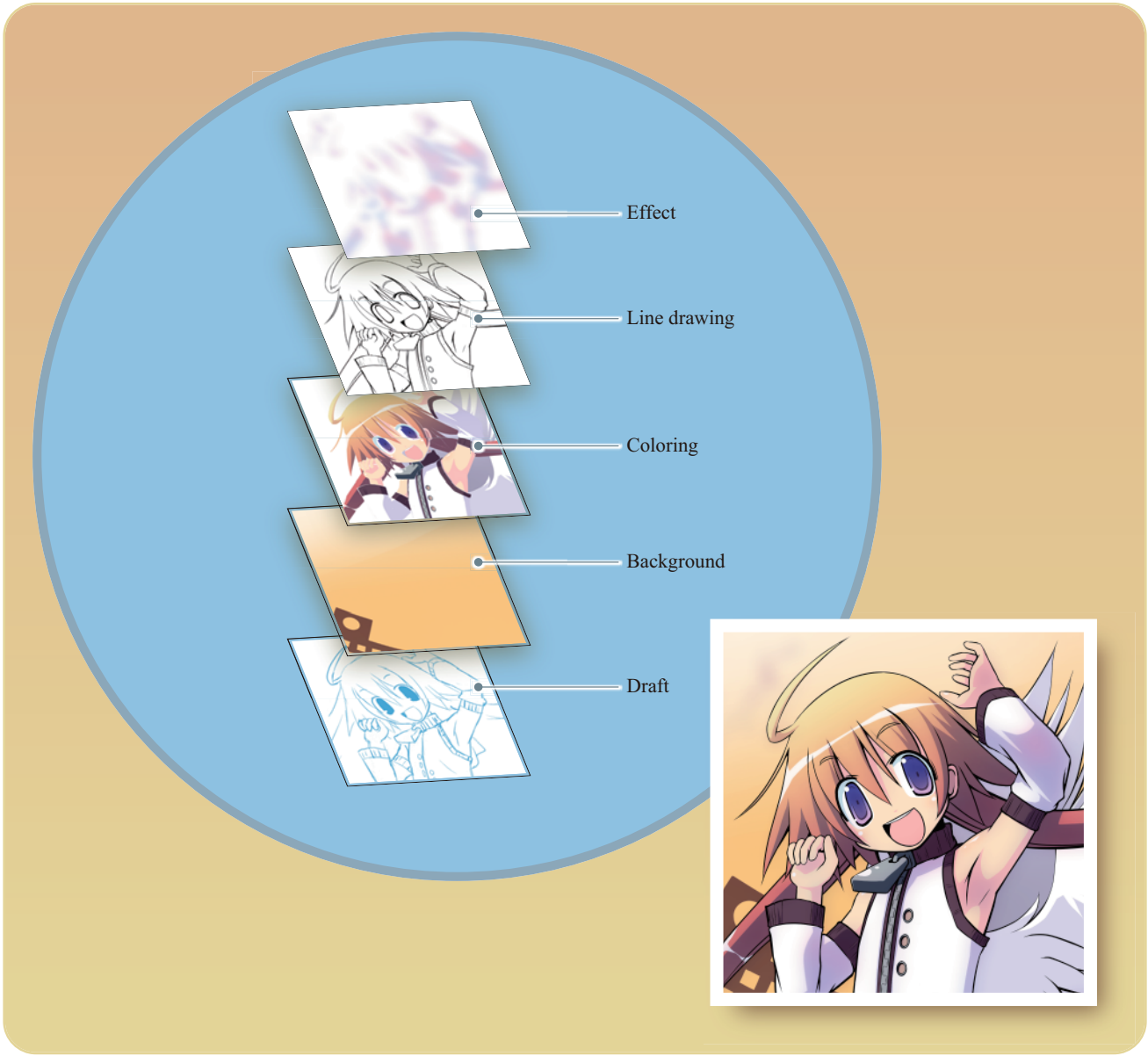
Layer Menu

The [Layer] menu is for performing operations related to layers.

Explanation: What Is a Layer?

A [Layer] is something similar to a transparent film stacked in order. A completed image is a group of stacked layers viewed from the top.

In digital authoring, a work consists of layers with different characteristics created in each process, which are then combined and edited.



In the example above, the canvas is composed from top to bottom, of a "Highlight" layer, a "Line drawing" layer, a "Color" layer, a "Background" layer, and a "Draft" layer.

Since you can work on each layer individually, you can create a "Color" layer separate from the "Line drawing" layer to paint without affecting the image drawn on the "Line drawing" layer.

As just described, the types of layers and how to stack them are major points to take into account when working digitally.

New raster layer

Creates a new raster layer (layer for drawing) above the selected layer.

1 Select the command

Select [Layer] menu → [New raster layer].

2 The creation of new layer is complete

A new raster layer is created above the selected layer.

New layer

Creates a new layer. The types of layers you can create are as follows.

Raster layer	Creates a new layer for drawing above the selected layer.
Vector layer	Creates a new vector layer above the selected layer. Vector layer is a layer that allows changes in the shape of the brush tip or brush size, as well as re-editing of lines by displaying handles and control points, even after the lines are drawn.
Gradient	A layer for drawing gradation. ● The gradation pattern can be changed afterwards with the [Tool property] palette, for example. ● Creating a layer after creating a selection masks the area outside the selected area, which you can adjust by selecting the mask and using a drawing tool and/or eraser tool on it.
Fill in Monochrome layer	A single colored layer that can be used for filling in one color. ● The color can be changed afterwards with the [Tool property] palette, for example. ● Creating a layer after creating a selection masks the area outside the selected area, which you can adjust by selecting the mask and using a drawing tool and/or eraser tool on it.
Tone	Creates a toned [Fill in monochrome] layer. The [Simple tone settings] dialog box opens while you are creating the layer. On the dialog box, you can configure settings related to the number of tone lines (halftone dots) and type of halftone dots.
Frame folder	Creates a new frame folder in accordance with the default border settings.
Paper layer	Creates a [Paper] layer on the canvas. [Paper] layer is a monochrome layer at the bottom of the data. Hiding the [Paper] layer displays transparent areas of the image on the canvas in a checkered pattern. A [Paper] layer cannot be created for canvases that already have one. Furthermore, the operations below are not available for [Paper] layer. ● Set as draft layer ● Set as reference layer ● Clip at layer below

Raster layer

Creates a new raster layer (layer for drawing) above the selected layer.

1 Select the command

Select [Layer] menu → [New layer] → [Raster layer]. The [New raster layer] dialog box displays.

(1) Configure the layer.

(2) Click [OK].

2 The creation of layer is complete

The new raster layer is added to the [Layer] palette.

[New raster layer] Dialog Box

(1) Name

Configure the layer name.

(2) Expression color

Allows you to configure the default expression color. Select from [Color], [Gray] and [Monochrome].

Important

The expression color [Plain color] configured with Ver.1.2.1 or earlier is converted into the following settings.

- **Expression color: Gray**
- **Drawing color: Only black button ON**

(3) Drawing color

Configures the drawing color for [Gray] and [Monochrome]. Configure the color with the [Black] and [White] buttons.

Memo

[Drawing color] displays when [Expression color] is gray or monochrome.

Gray

The drawing color is configured as follows with the [Black] and [White] buttons.

Only black button ON	The drawing color is configured as a gradation from black to transparent.
Only white button ON	The drawing color is configured as a gradation from white to transparent.
Both black and white buttons ON	The drawing color is configured as a gradation from black to white.

Monochrome

The drawing color is configured as follows with the [Black] and [White] buttons.

Only black button ON	The drawing color is configured as black.
Only white button ON	The drawing color is configured as white.
Both black and white buttons ON	The drawing color is configured as black and white.

(4) Blending mode

Configure how to combine with other layers.

Vector layer

Creates a new vector layer above the selected layer. Vector layer is a layer that allows changes in the shape of the brush tip or brush size, as well as re-editing of lines by displaying handles and control points, even after the lines are drawn.

On the vector layer, the following tools can be used to draw.

Tools for drawing on the vector layer	[Pen] [Pencil] [Brush] [Air brush] [Decoration] [Eraser] [Figure]

Important

- **The [Fill] tool cannot be used on the vector layer.**
- **When drawn on a vector layer, a drawing may have a different touch than when drawn on a raster layer depending on the selected [Sub tool].**

Memo

For how to edit vector layers, see "Explanation: Editing a Vector Layer" .

1 Select the command

Select [Layer] menu → [New layer] → [Vector layer]. The [New vector layer] dialog box displays.

(1) Configure the layer.

(2) Click [OK].

2 The creation of layer is complete

The new vector layer is added to the [Layer] palette.

[New vector layer] Dialog Box

(1) Name

Configure the layer name.

(2) Expression color

Allows you to configure the default expression color. Select from [Color], [Gray] and [Monochrome].

Important

The expression color [Plain color] configured with Ver.1.2.1 or earlier is converted into the following settings.

- **Expression color: Gray**
- **Drawing color: Only black button ON**

(3) Drawing color

Configures the drawing color for [Gray] and [Monochrome]. Configure the color with the [Black] and [White] buttons.

Memo **[Drawing color] displays when [Expression color] is gray or monochrome.**

Gray

The drawing color is configured as follows with the [Black] and [White] buttons.

Only black button ON	The drawing color is configured as a gradation from black to transparent.
Only white button ON	The drawing color is configured as a gradation from white to transparent.
Both black and white buttons ON	The drawing color is configured as a gradation from black to white.

Monochrome

The drawing color is configured as follows with the [Black] and [White] buttons.

Only black button ON	The drawing color is configured as black.
Only white button ON	The drawing color is configured as white.
Both black and white buttons ON	The drawing color is configured as black and white.

(4) Blending mode

Configure how to combine with other layers.

Gradient

A layer for drawing gradation.

- The gradation pattern can be changed afterwards with the [Tool property] palette, for example.
- Creating a layer after creating a selection area masks the area outside the selected area. You can adjust the drawing area on the layer by selecting the mask and using a drawing tool and/or eraser tool on it.

Creating a Gradient Layer

1 Select the layer

On the [Layer] palette, select a layer. The [Gradient] layer will be created above the selected layer.

2 Configure the color of the gradation

Using a color palette, configure the color at the starting point and that at the end point of the gradation.

- The color at the starting point is the main drawing color.
- The color at the end point is the sub drawing color.

In this example, the main and sub drawing colors are configured so that the gradation changes from blue to white.

3 Create a selection

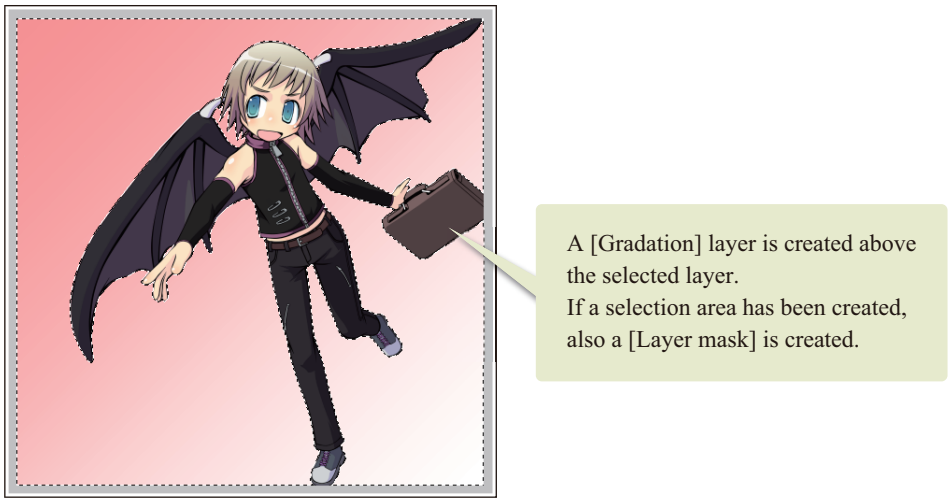
Using a Marquee tool, create a selection.

Memo

If a selection is not created, an undrawn mask will be created in the [Gradient layer].

4 Create the gradient layer

Select [Layer] menu → [New layer] → [Gradient]. A [Gradient] layer is created above the selected layer.



Editing the Gradient Layer

To edit the pattern and drawing area after creating the [Gradient] layer, proceed as follows.

Editing the Gradation Pattern

1 Select the layer

On the [Layer] palette, select the [Gradient] layer.

2 Select the tool

On the [Tool] palette, select the [Operation] tool.

3 Select the sub tool

On the [Sub tool] palette, select [Object].

4 Adjust the gradation pattern

The gradation settings display on the [Tool property] palette. For details on the setting items, see the paragraphs on "Gradation" in "Manga Studio 5.0 Tool Setting Guide".

Original image

After gradation adjustment

Editing the Starting/End Position and Direction of the Gradation

1 Select the layer

On the [Layer] palette, select the [Gradation] layer.

2 Select the tool

On the [Tool] palette, select the [Operation] tool.

3 Select the sub tool

On the [Sub tool] palette, select [Object].

4 Edit the starting/end position and direction

The handles to edit the starting and end positions of the gradation and the like are displayed on the canvas. Drag the starting point and/or end point to adjust the position(s).

Straight gradation

(1) Configure the starting position by dragging the starting point cross (+).

(2) Configure the end position by dragging the end point square (□).

Circular gradation

(1) Configure the starting position by dragging the starting point cross (+).

(2) Two end point squares (□) are displayed. Drag either one to configure the end position.

Elliptical gradation

(1) Configure the starting position by dragging the starting point cross (+).

(2) Four end point squares (□) are displayed. Drag one of the four to configure the end position.

Editing the Gradation Drawing Area

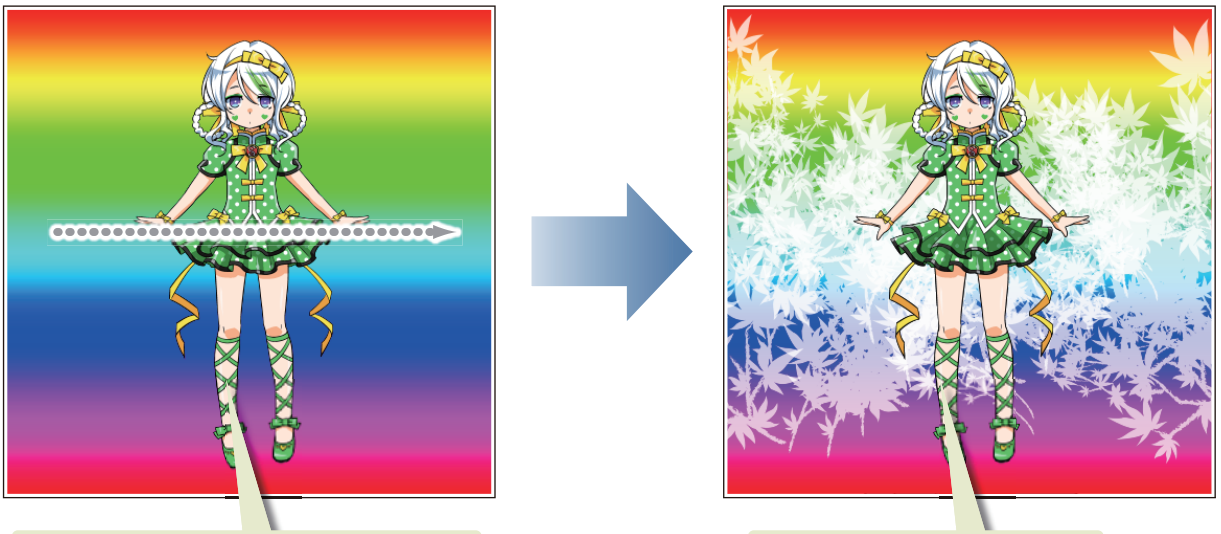
Creating the [Gradient] layer after creating a selection masks the area outside the selected area. You can adjust the drawing area on the layer by selecting the mask and using a drawing tool and/or eraser tool on it.

1 Select the mask layer

On the [Layer] palette, select the mask of the [Gradient] layer.

2 Adjust the drawing area

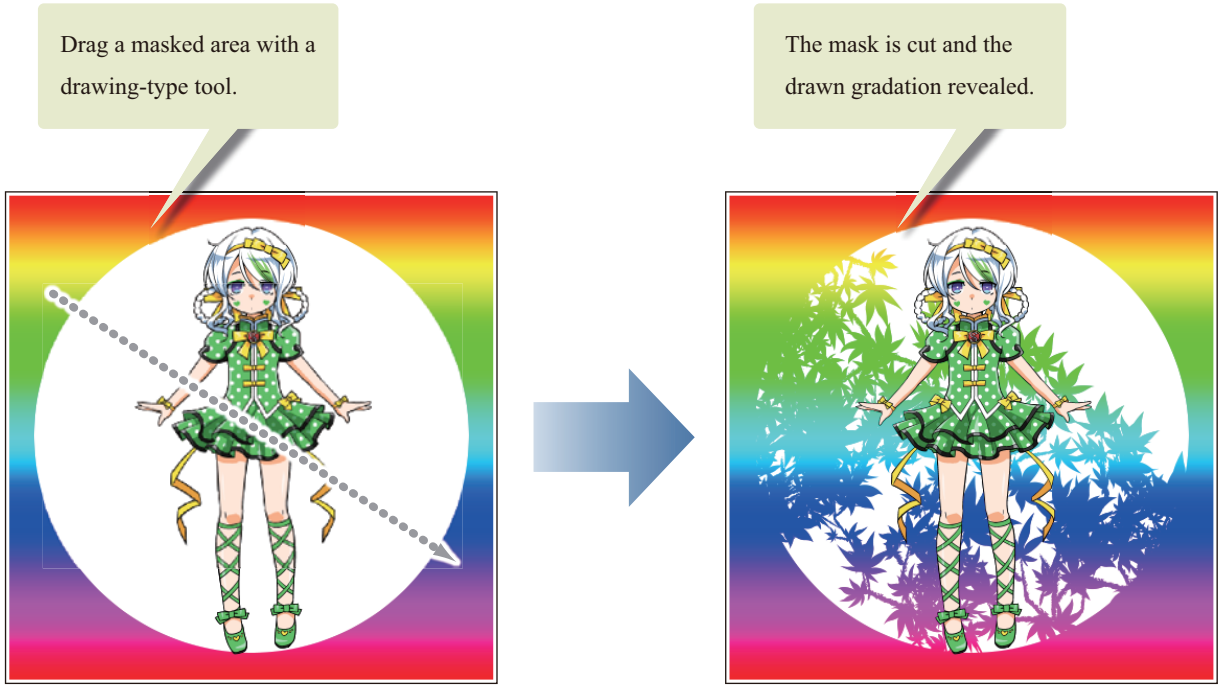
You can adjust the drawing area on the layer by selecting the mask and using a drawing tool and/or eraser tool on it.



Drag a non-masked area with a drawing-type tool with transparent color.

The image is masked and the gradation hidden.

Using the [Eraser] tool and drawing tool configured with a transparent color on an area without mask creates a mask that hides the drawing.



Using a drawing tool on a masked area cuts the mask and reveals the drawing.

Fill

A single colored layer that can be used for filling in one color.

- The color can be changed afterwards with the [Tool property] palette, for example.
- Creating a layer after creating a selection masks the area outside the selected area. You can adjust the drawing area on the layer by selecting the mask and using a drawing tool and/or eraser tool on it.

Creating a Fill in monochrome Layer

1 Select the layer

On the [Layer] palette, select a layer. The [Fill in monochrome] layer will be created above the selected layer.

2 Create a selection

Using a Marquee tool, create a selection.

Memo **If a selection is not created, an undrawn mask will be created in the [Fill in monochrome] layer.**

3 Select the command

Select [Layer] menu → [New layer] → [Fill].

4 Configure the fill color

The dialog box for selecting a color displays. In this example, "red" is used.

Memo **The dialog box for selecting a color varies depending on your OS.**

5 The creation of the layer is complete

A [Fill in monochrome] layer is created above the selected layer.

A [Fill in monochrome] layer is created above the selected layer.
If a selection area has been created, also a [Layer mask] is created.

Editing a Fill in monochrome Layer

To edit the color and drawing area after creating the [Fill in monochrome] layer, proceed as follows.

Editing the Fill Color

1 Select the layer

On the [Layer] palette, select the [Fill in monochrome] layer.

2 Select the tool

On the [Tool] palette, select the [Operation] tool.

3 Select the sub tool

On the [Sub tool] palette, select [Object].

4 Configure the fill color

Using a color palette, specify the fill color.

5 The color change is complete

The layer is now filled in the specified color.

Memo

The color of the [Fill in monochrome] layer can also be changed by the following procedure:

1. On the [Layer] palette, select the [Fill in monochrome] layer.

2. Select the [Operation] tool and configure [Object] for sub tool.

3. Specifying the color in [Fill color] on the [Tool property] palette changes the color.

Editing the Drawing Area

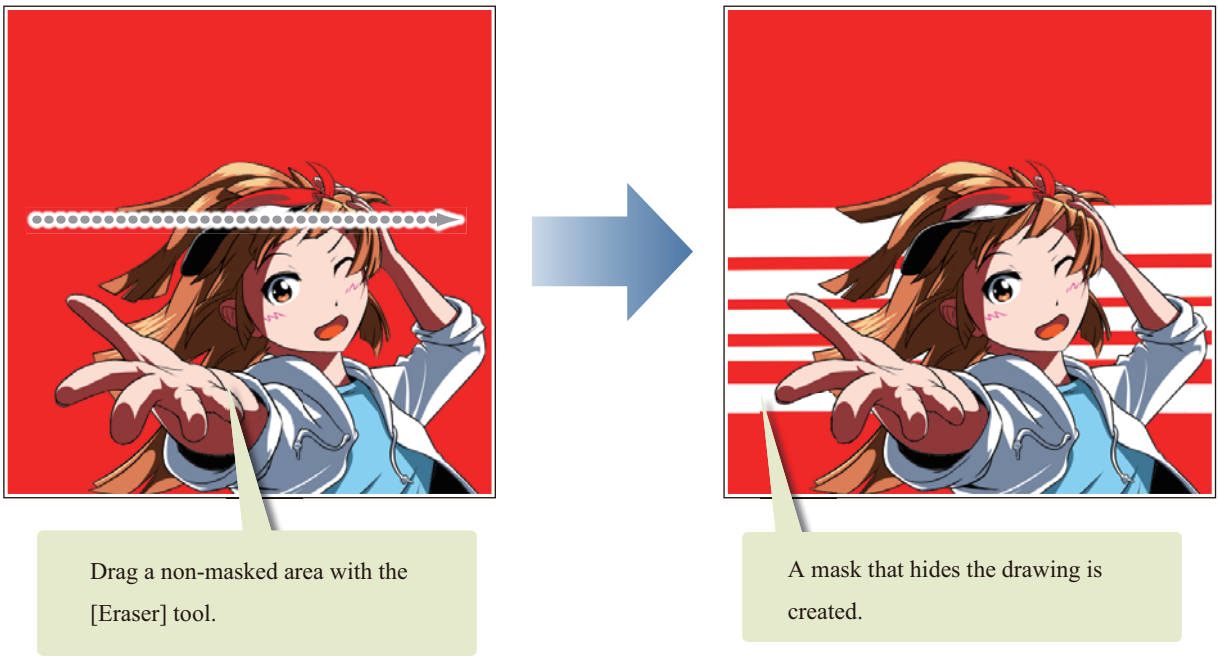
Creating the [Fill in monochrome] layer after creating a selection masks the area outside the selected area. You can adjust the drawing area on the layer by selecting the mask and using a drawing tool and/or eraser tool on it.

1 Select the mask layer

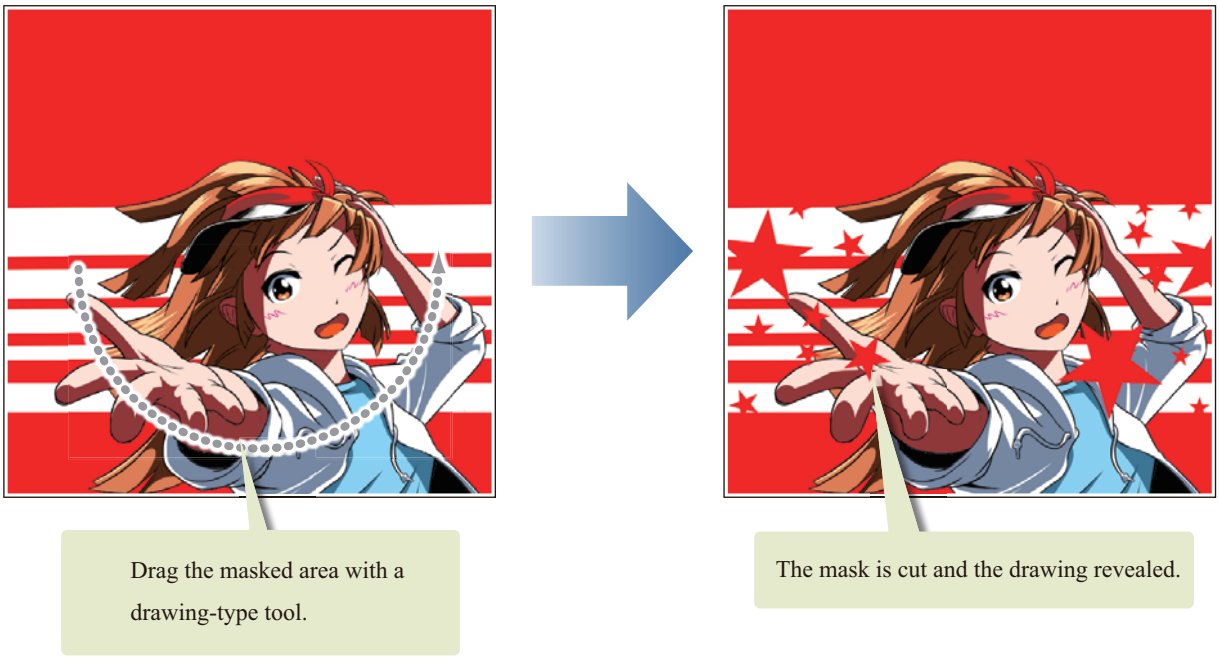
On the [Layer] palette, select the mask of the [Fill in monochrome] layer.

2 Adjust the drawing area

You can adjust the drawing area on the layer by selecting the mask and using a drawing tool and/or eraser tool on it.



Using the [Eraser] tool creates a mask that hides the drawing.



Using a drawing tool cuts the mask and reveals the drawing.

Tone

Creates a new toned [Fill in monochrome] layer. The [Simple tone settings] dialog box opens while you are creating the layer. On the dialog box, you can configure settings related to the number of lines and halftone dots.

Memo

The procedure to create the layer is the same as that for the [Fill in monochrome] layer with the exception of the [Simple tone settings] dialog box that opens. For the procedure other than that for configuring the dialog box, see "Fill" .

[Simple tone settings] Dialog Box

(1) Number of lines

Specify the number of tone (halftone dot) lines. The larger the value, the smaller will be the halftone dot.

(2) Density

Specify the density of the tone (halftone dot).

(3) Type

Select the shape of the tone.

(4) Angle

Configure the angle of the tone (halftone dot).

(5) Size

Configure the noise size. You can configure this item when noise is selected for [Type].

(6) Factor

Configure the noise factor. You can configure this item when noise is selected for [Type].

(7) If there are tones with the same settings, combine them into one

When turned on, if a toned [Fill in monochrome] layer with the same settings exists, it is integrated into the created layer. This item is displayed only when a selection has been created.

Frame Border folder

Creates a frame folder at the top of the layers. The frame border is created in accordance with the default border size settings.

Memo **For how to draw inside frame borders or how to edit frame borders, see "Explanation: Frame Cut" .**

1 Select the command

Select [Layer] menu → [New layer] → [Frame Border folder]. The [New frame folder] dialog box displays.

(1) Configure the frame folder.

(2) Click [OK].

Memo **For 2-page spreads, the item [Left page/Right page] displays. [Left page/Right page] is for specifying the page for which to create the frame folder.**

2 The creation of frame folder is complete

The new [Frame folder] is added at the top of the [Layer] palette.

[New frame folder] Dialog Box

(1) Name

Configure the name for the frame folder.

(2) Draw borders

Draw border lines to the frame borders.

(3) Line width

Specify line width for the frame borders.

(4) Anti-aliasing

Applies anti-aliasing to the frame border lines. With anti-aliased lines, you can draw smoother outlines as jags are smoothed. Select [None] when not applying anti-aliasing. When applying, you can select its strength from [Weak], [Middle] and [Strong].

(5) Left page/Right page

Specify the page of the 2-page spread for which to create the frame folder.

Important **[Left page/Right page] displays only for 2-page spreads.**

Explanation: Editing a Vector Layer

Vector layer is a layer that allows changes in the shape of the brush tip or brush size, as well as re-editing of lines by displaying handles and control points even after the lines are drawn. Tools available for editing drawings on a vector layer are as follows.

[Object] sub tool of the [Operation] tool	Displays the handle to rotate/move/transform the entire line. It can also drag a control point to transform its neighborhood. Furthermore, the [Tool property] palette allows you to change the shape of the brush tip, brush size, line color, and so on.
[Correct line] tool	It allows you to correct control points, line width and the like.

The following describes how to edit a line drawn on a vector layer for each tool.

Editing with the Operation Tool

Selecting a drawing on the vector layer with the [Object] sub tool of the [Operation] tool displays the handles. By operating a handle, you can rotate/move/transform the entire line. You can also transform the neighborhood of a control point by dragging the control point. Furthermore, the [Tool property] palette allows you to change the shape of the brush tip, brush size, line color, and so on.

Transforming a Line

To transform a line drawn on the vector layer proceed as follows.

1 Select the vector layer

On the [Layer] palette, select the [Vector] layer you want to transform.

2 Select the tool

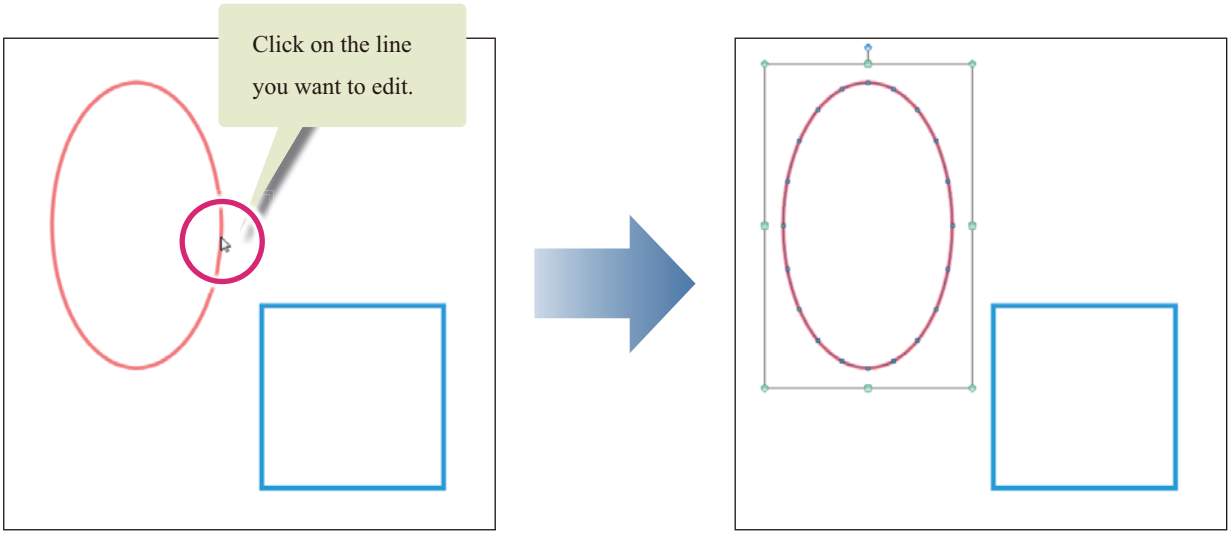
On the [Tool] palette, select the [Operation] tool.

3 Select the sub tool

Open the [Sub tool] palette to select [Object].

4 Select the line to edit

Click the line you want to edit. Handles are displayed on the selected line.



Memo

- To select a group of consecutive objects, click the objects while holding the [Shift] key down.
- Dragging on the canvas with the [Object] sub tool after turning on [Multiple selection by drag] by selecting [Select] category → [Operation of transparent part] on the [Sub tool detail] palette allows you to select all objects inside the specified area at once.

5 Transform the line

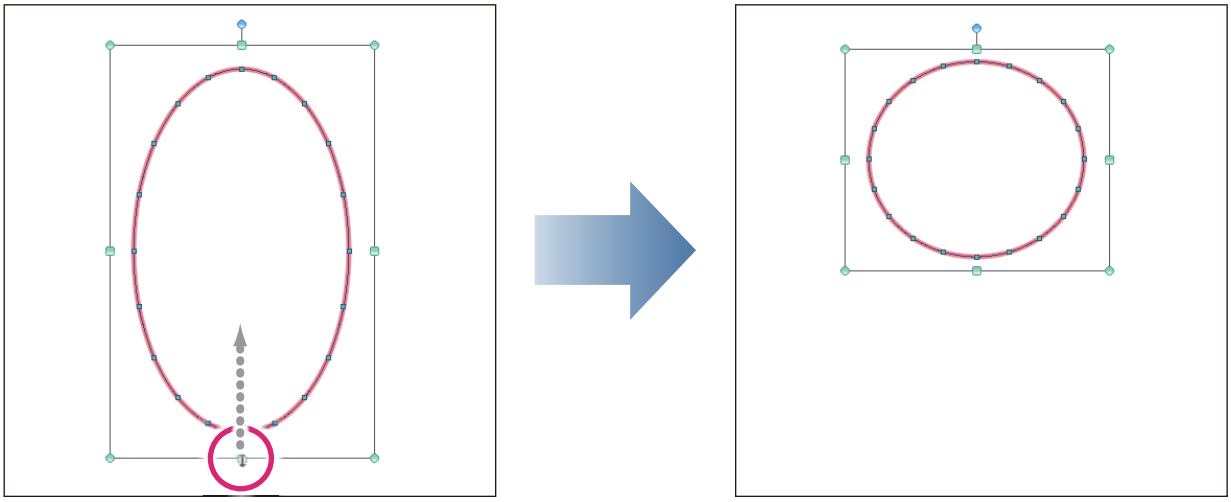
Using the handles and control point of the guide, adjust the image orientation, size, shape and the like.

Memo

Turning on [Change thickness while scaling] on [Sub tool detail] palette → [Select] category during transform allows you to change the line thickness in accordance with the transform.

Scaling up/down an image

Dragging a handle outside of the image allows you to scale up/down the image.

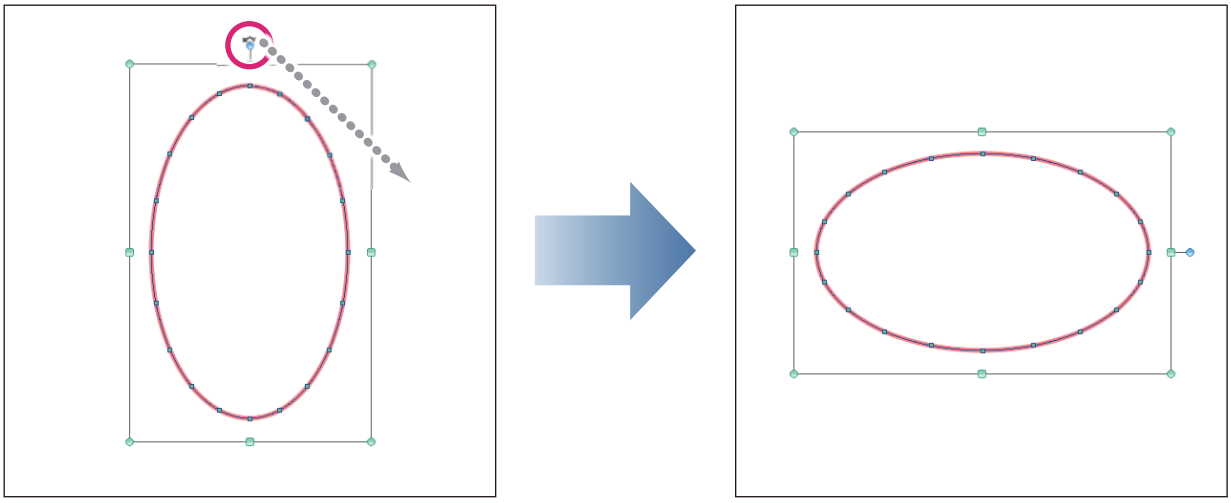


Memo

- If [Free transform] is configured for [Operation] on the [Tool property] palette, you can freely transform the image by dragging its handles.
- Pressing the [Alt] key while transforming allows you to transform around the center of the frame. (*)

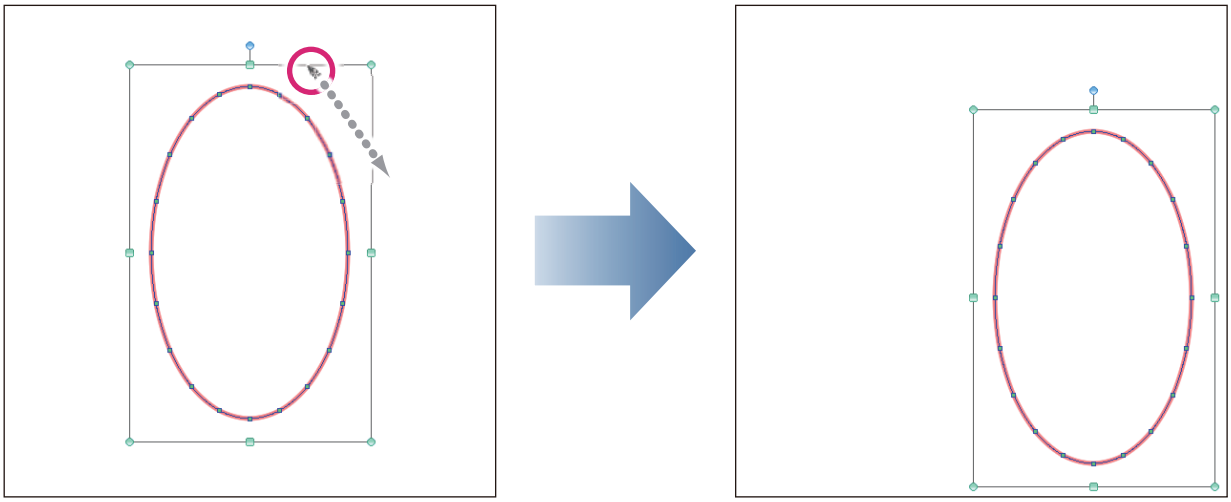
Rotating an Image

Dragging the control point allows you to rotate the image.



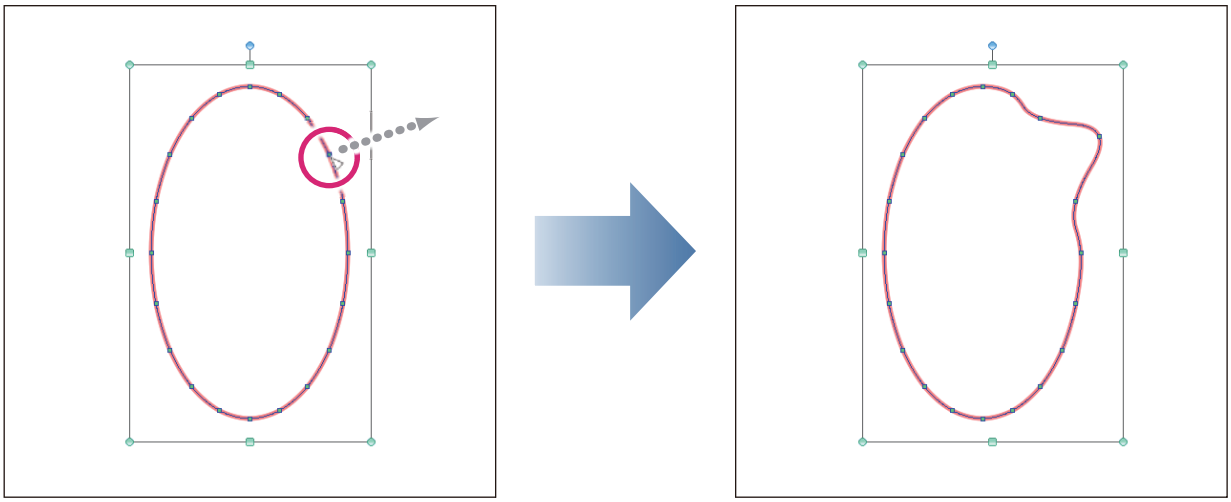
Moving an Image

Dragging the vector line or the guide allows you to move the image.



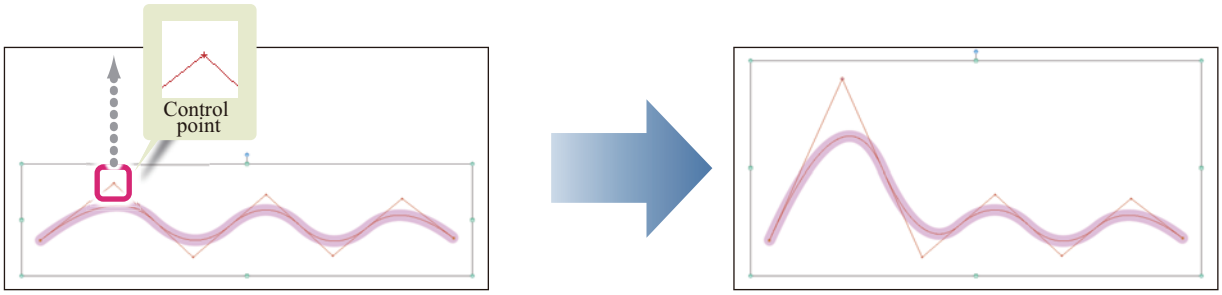
Transforming an Image

Dragging a control point on the line allows you to transform the neighborhood of the control point.

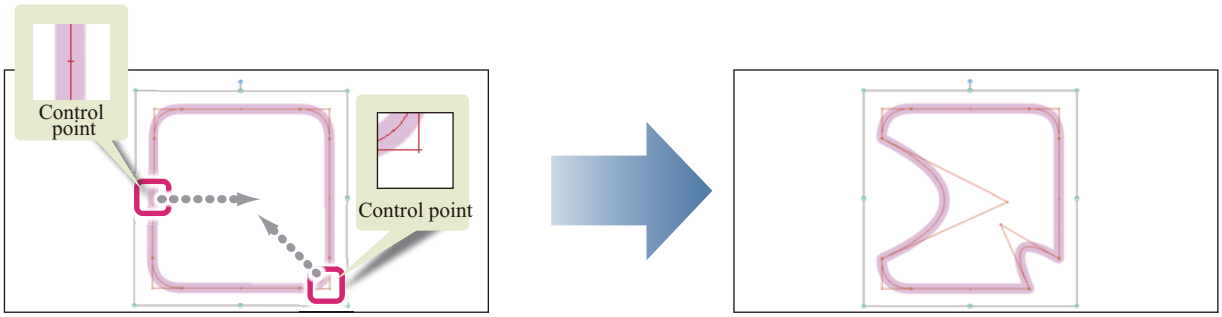


Transforming a Curve

Control points are displayed for rectangles and polygons configured with [Rounded corner], and for quadratic and cubic Bezier curves. Dragging a control point allows you to transform the curve.



Example of curve: Quadratic Bezier



Example of curve: Rectangle with rounded corners

Changing the Line Color, Brush Shape, Brush Size, and the Like

With the [Tool property] palette, you can adjust the brush shape, brush size and line color of lines drawn on the vector layer.

1 Select the vector layer

On the [Layer] palette, select the [Vector] layer you want to transform.

2 Select the tool

On the [Tool] palette, select the [Operation] tool.

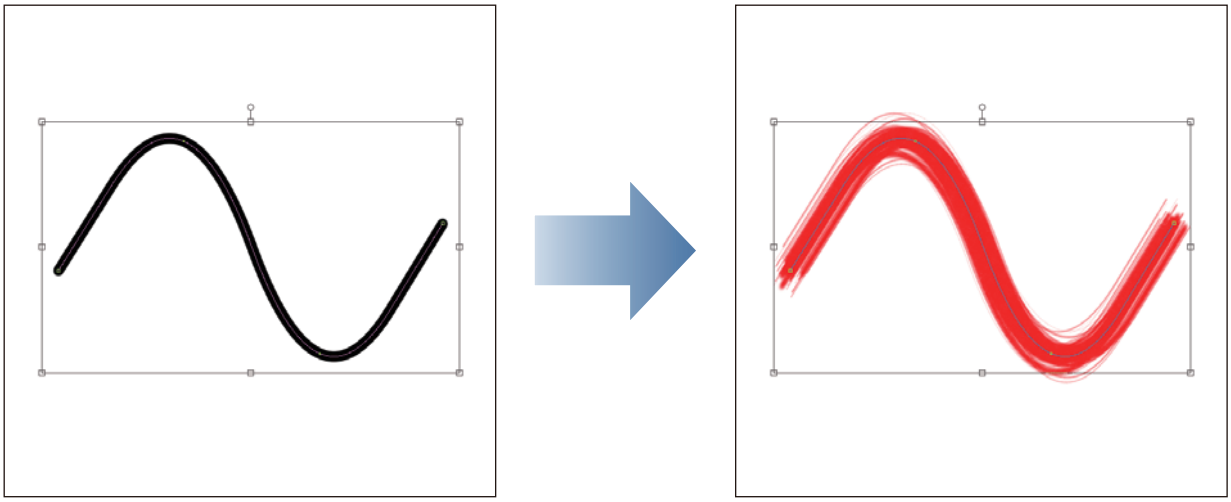
3 Select the sub tool

Open the [Sub tool] palette to select [Object].

4 Adjust the shape of the brush tip and/or size

Setting items such as line color, brush shape and size are displayed on the [Tool property] palette.

To change the line color, brush shape and/or size, adjust the settings.



Right-click Menu during Object Tool Use

Right clicking on a vector line when the [Object] sub tool of the [Object] tool is selected displays a menu. From the displayed menu, you can perform the following operations you can perform from [Correct line] tool → [Control point] sub tool.

- Add control point
- Delete control point
- Switch corner
- Divide line

Memo

For details on the operations you can perform, see "Control point" .

Selecting Multiple Control Points

To select multiple control points, proceed as follows.

Multiple selection by Shift key

1 Select the tool

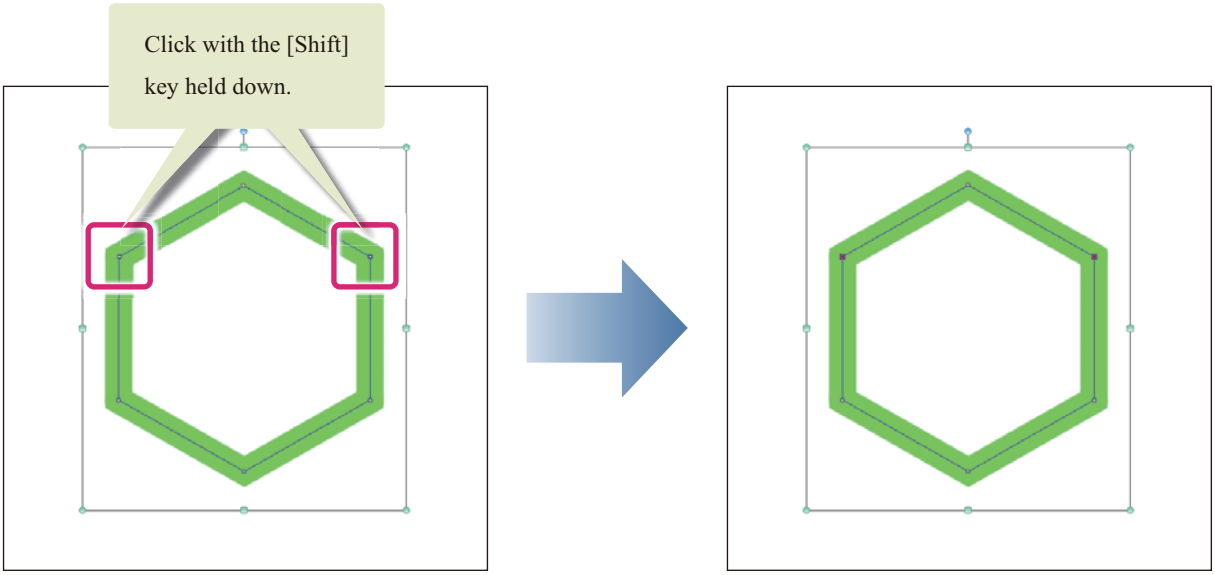
On the [Tool] palette, select the [Operation] tool.

2 Select the sub tool

Open the [Sub tool] palette to select [Object].

3 Select the control points

Consecutively click the control points while holding the [Shift] key down. Multiple control points are selected.



Multiple selection by drag

1 Select the tool

On the [Tool] palette, select the [Operation] tool.

2 Select the sub tool

Open the [Sub tool] palette to select [Object].

3 Open the [Sub tool detail] palette

Click [Sub tool detail] on the [Tool property] palette. The [Sub tool detail] palette opens.

4 Configure the [Sub tool detail] palette

On the [Sub tool detail] palette, configure the relevant items.

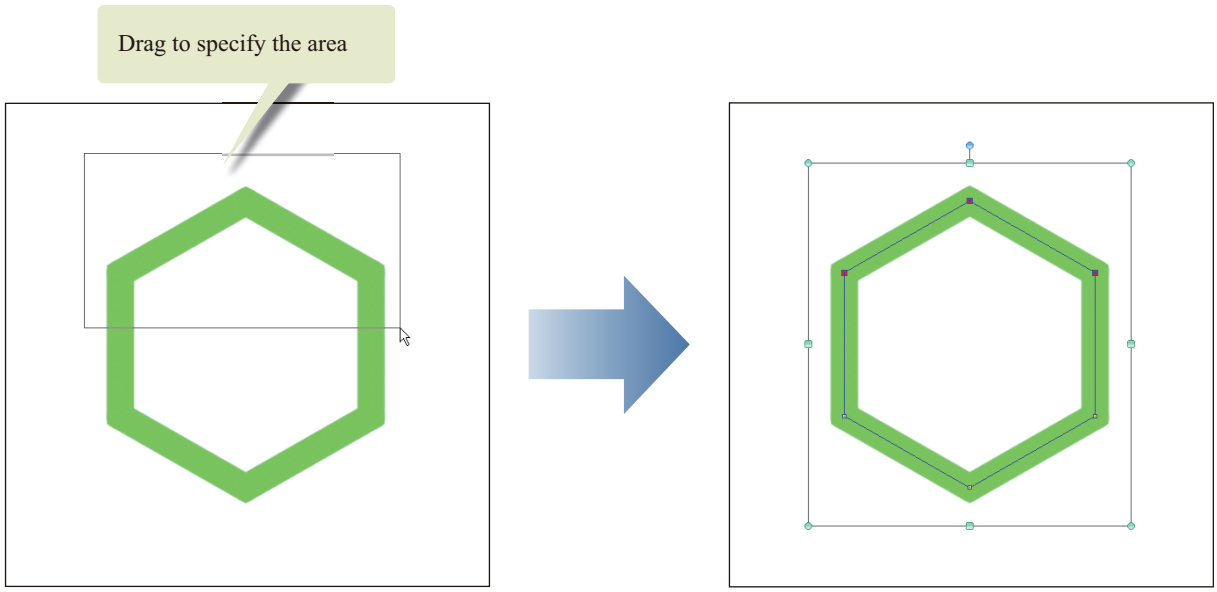
(1) Click [Operation of transparent part] under the [Select] category.

(2) Turn on [Select control point by drag].

Important **Turning on [Select control point by drag] disables [Multiple selection by drag]. In this case, you will not be able to select multiple objects by dragging.**

5 Select the control points

Drag on the canvas. The two or more control points inside the dragged area are selected.



Memo

- **Selecting multiple control points by dragging while holding the [Shift] key down allows you to select consecutively.**
- **To select additional control points after selecting multiple control points, click the control points you want to add with the [Shift] key held down.**

Editing with the Correct line Tool

With the [Correct line] tool, you can correct the control points, line width and the like.

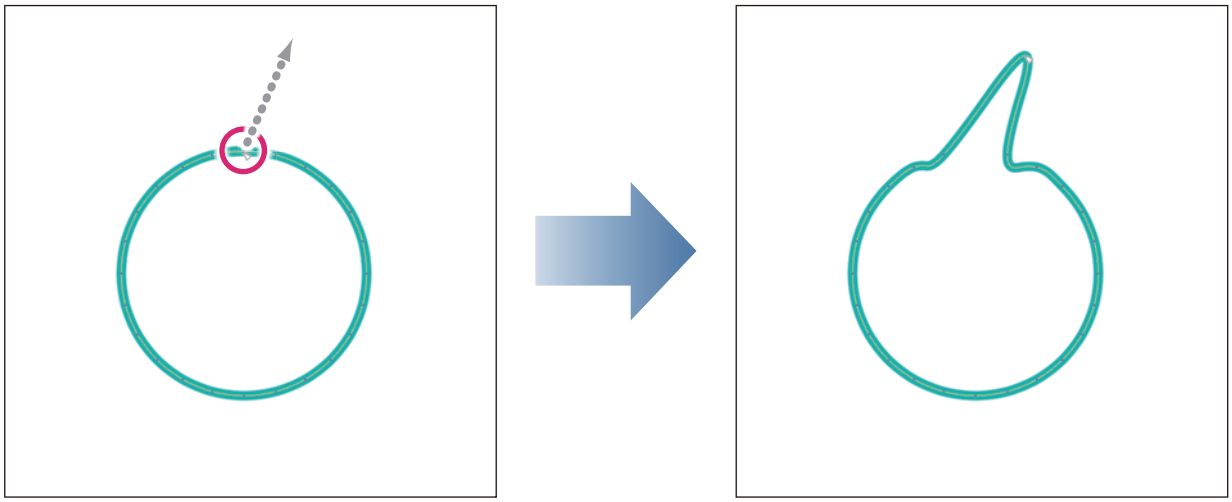
On the [Sub tool] palette, select the content you want to edit.

A. Control point

Allows you to move, add, delete, switch corners, change the line width and density, and so on. Select the content to edit from [Content of process] on the [Tool property] palette.

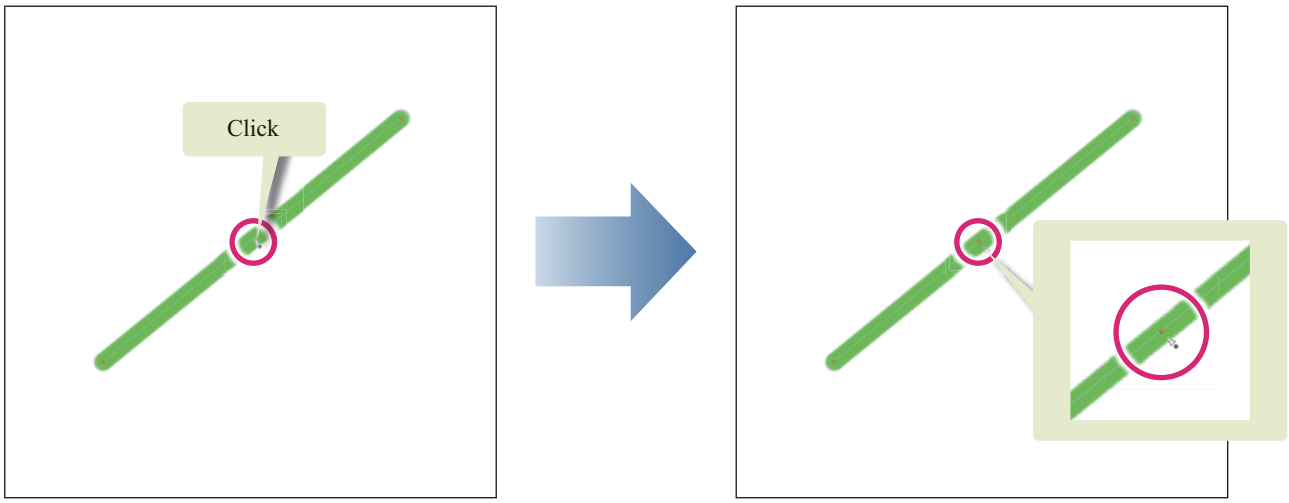
(1) Move control point

Dragging a control point allows you to transform the shape of the line near the control point.



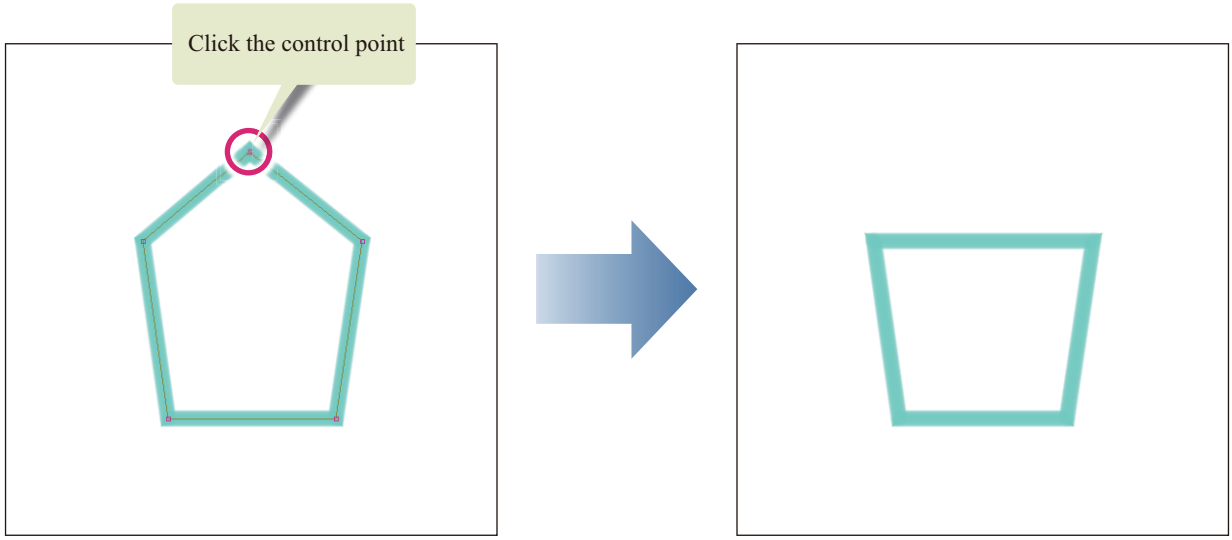
(2) Add control point

Clicking on the line allows you to add a control point. Furthermore, dragging the control point allows you to transform the shape of the line near the control point.



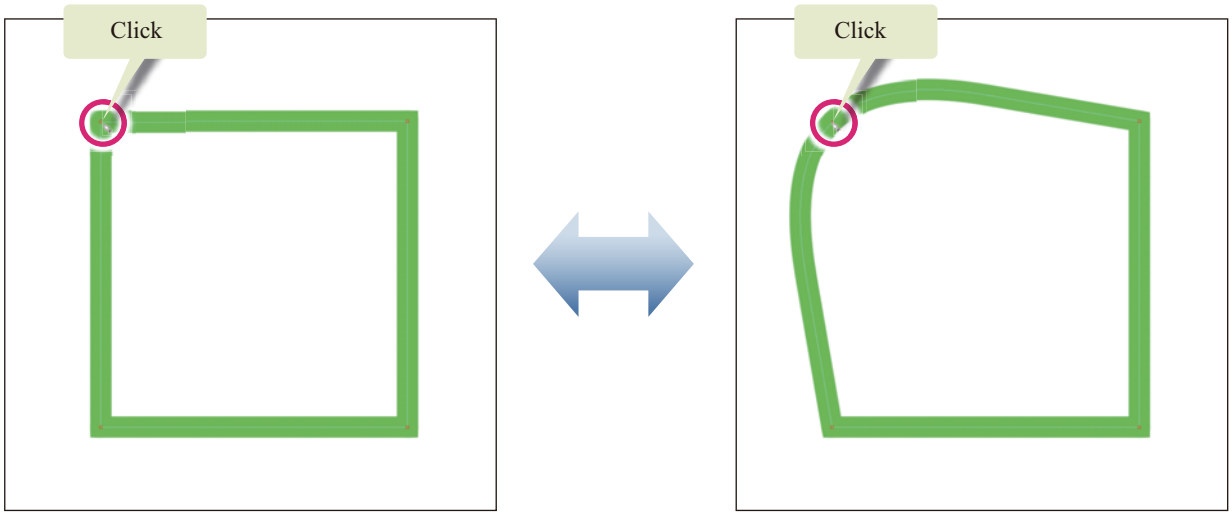
(3) Delete control point

Clicking a control point allows you to delete it.



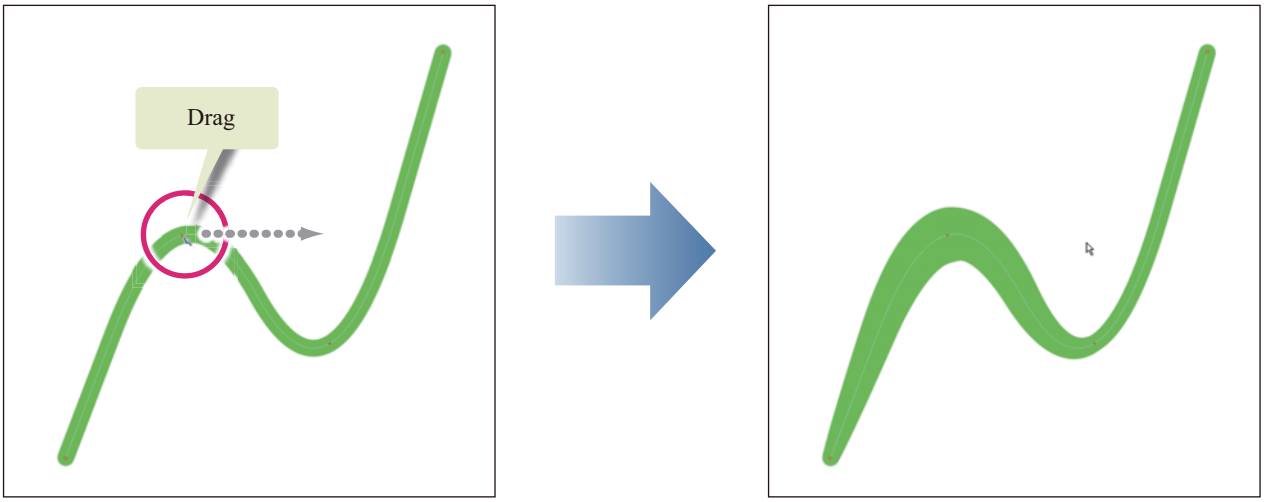
(4) Switch corner

Clicking a control point allows you to switch the type of corner at the clicked point. The corner toggles between angled corner and round corner on each click.

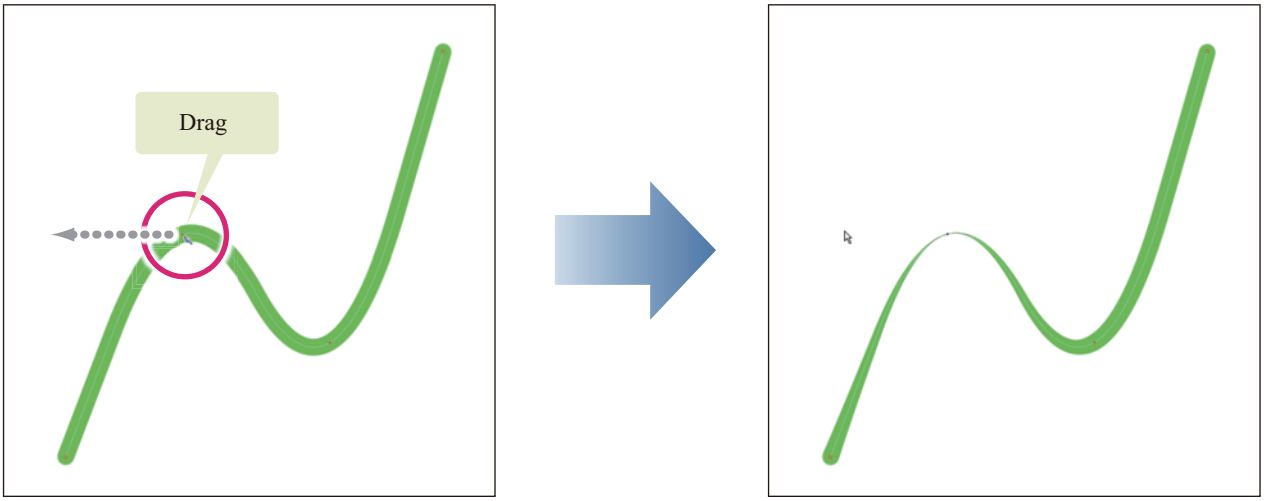


(5) Correct line width

Dragging a control point allows you to change the width of the line near the control point.



Correct line width (Thicker)

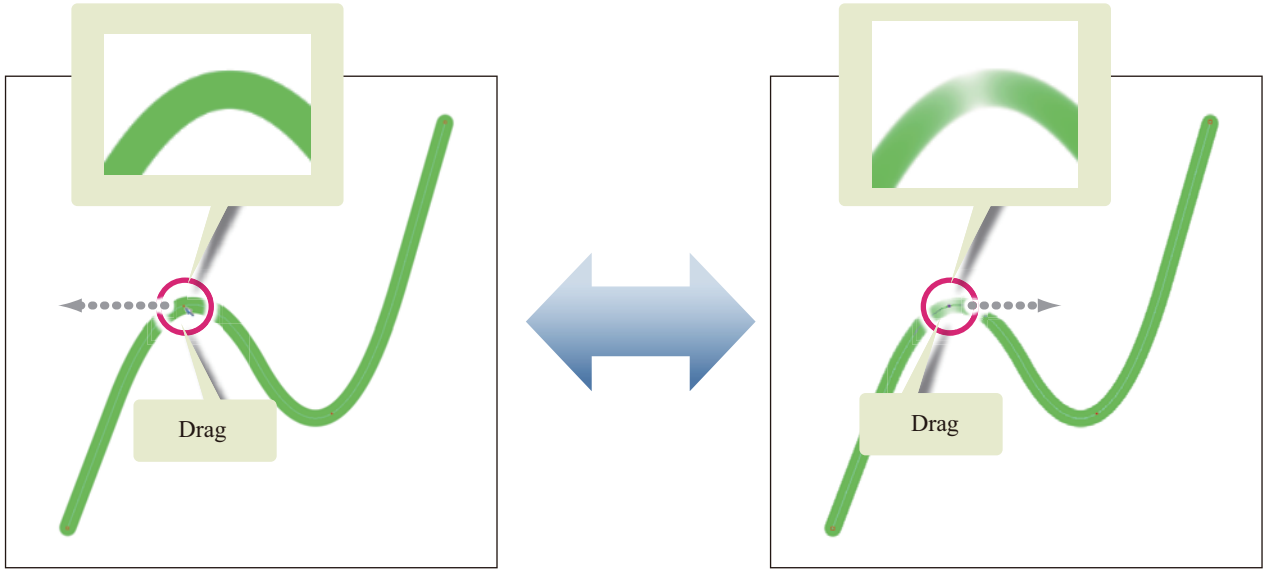


Correct line width (Thinner)

Important **[Correct line width] cannot be used to edit the control point of a ruler.**

(6) Correct density

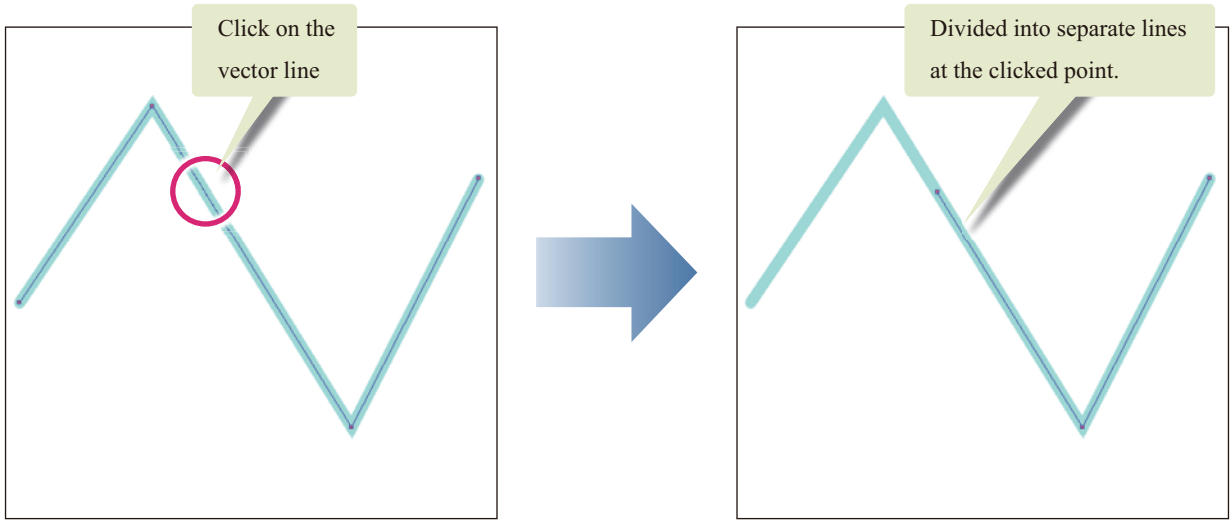
Dragging a control point allows you to change the density of the line near the control point.



Important **[Correct density] cannot be used to edit the control point of a ruler.**

(7) Divide line

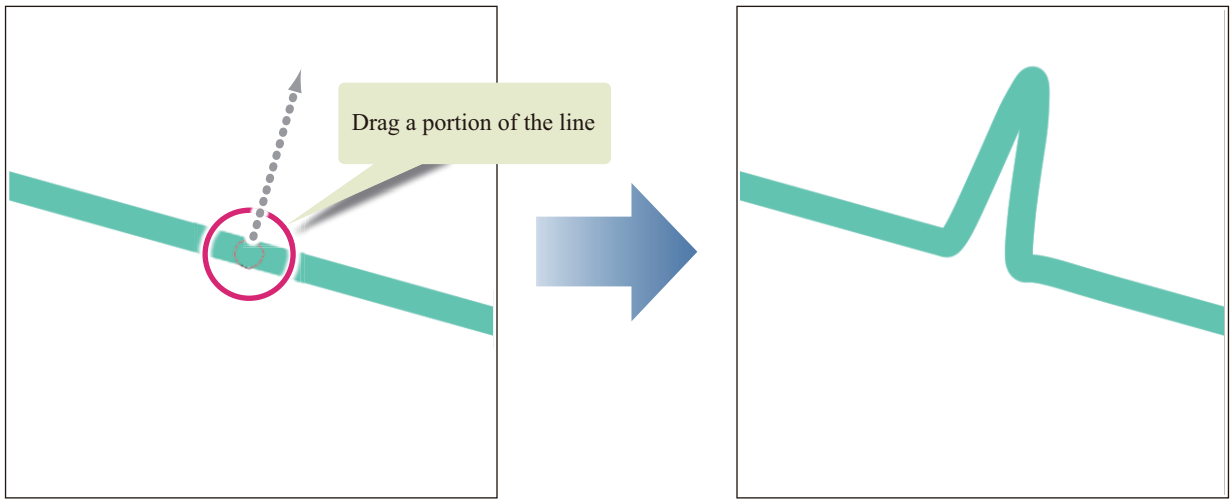
Allows you to cut a vector line at the clicked point and divide it into separate lines.



Important **[Divide line] cannot be used to edit the control point a [Special ruler].**

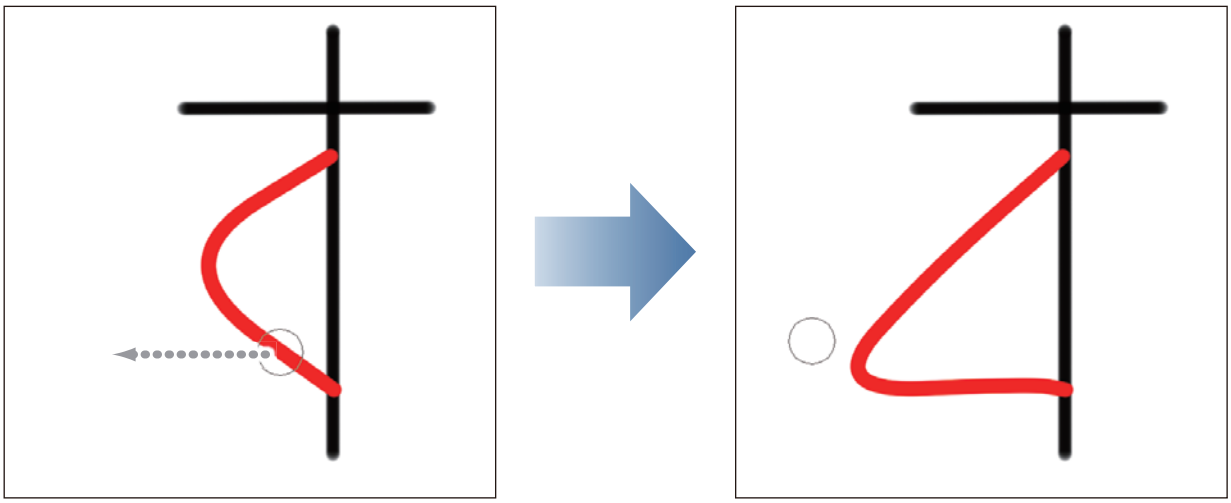
B. Pinch vector line

Allows you to transform a line by dragging a portion of the line. [Fix both ends] on the [Tool property] palette allows you to select whether or not and how to fix the starting point and end point when transforming the line.



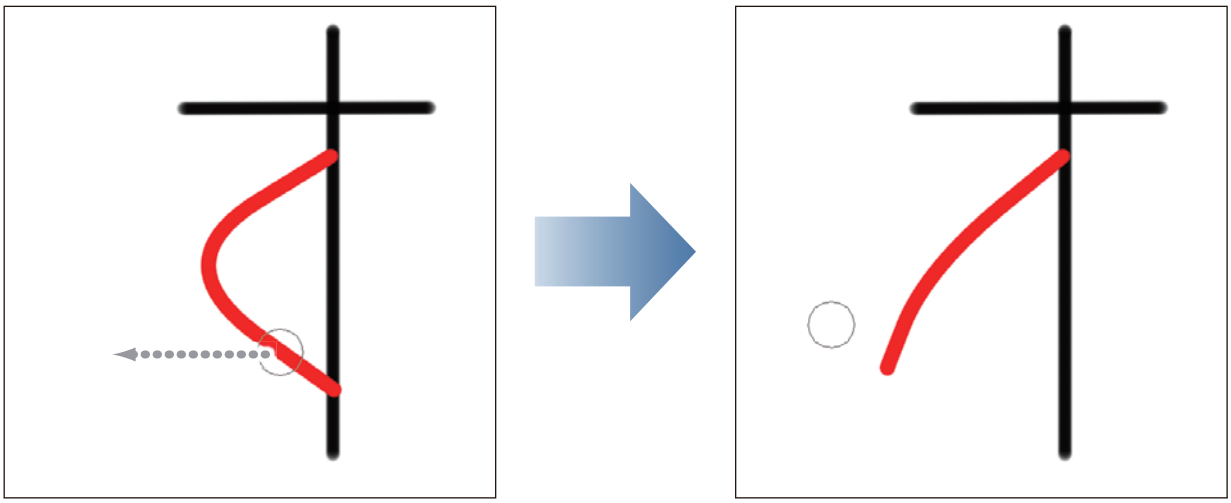
(1) Fix both ends

Fixes both starting and end points of the line. The starting point and end point do not move even if the line is pinched.



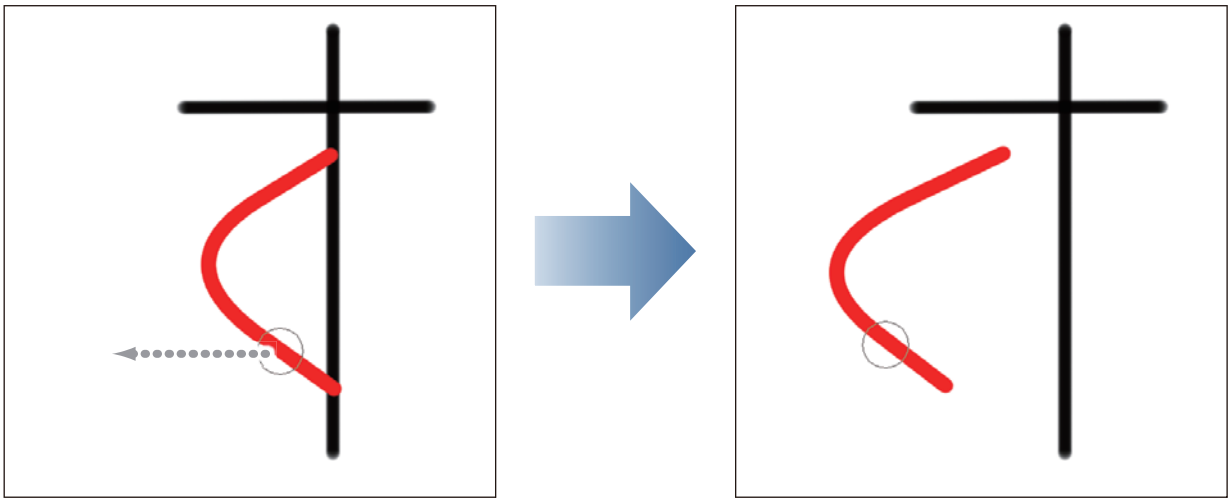
(2) Fix either end

Fixes the opposite end from the point where the line will be reshaped. The end that is fixed does not move even if the line is pinched.



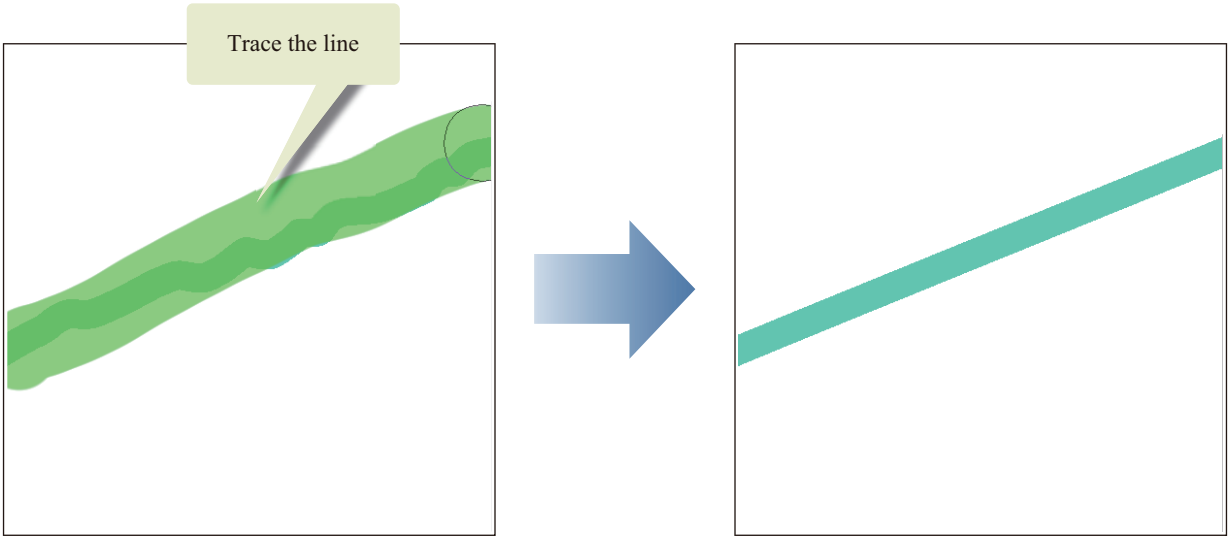
(3) Free both ends

Both starting point and end point of the line can move. When the line is pinched, both the starting point and end point may move depending on the value of [Pinch level].



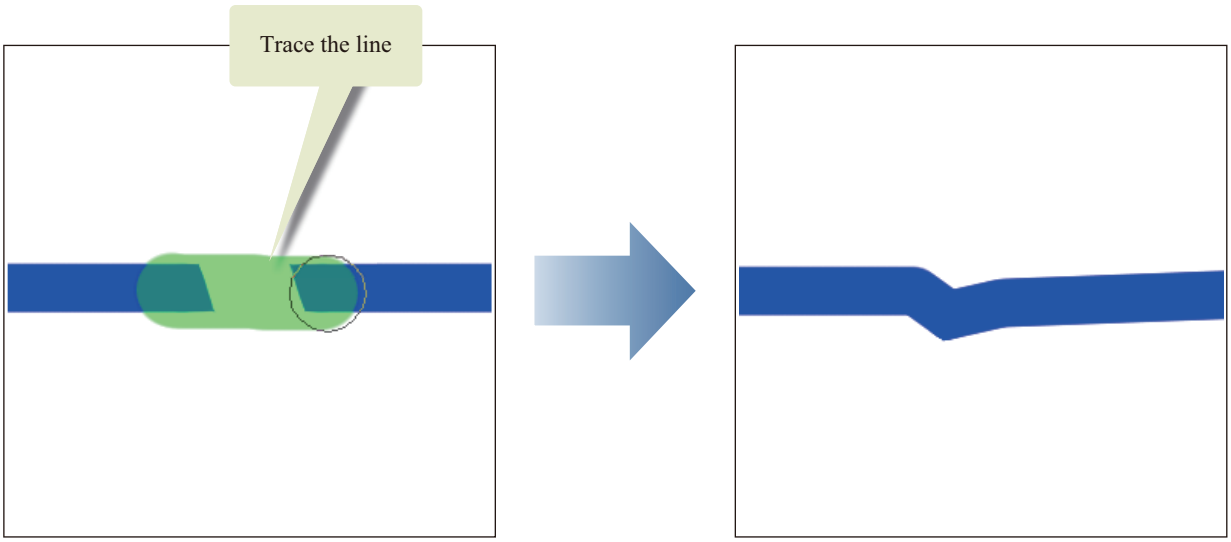
C. Simplify vector line

Dragging over a line as if tracing allows you to simplify the line by reducing the number of control points.



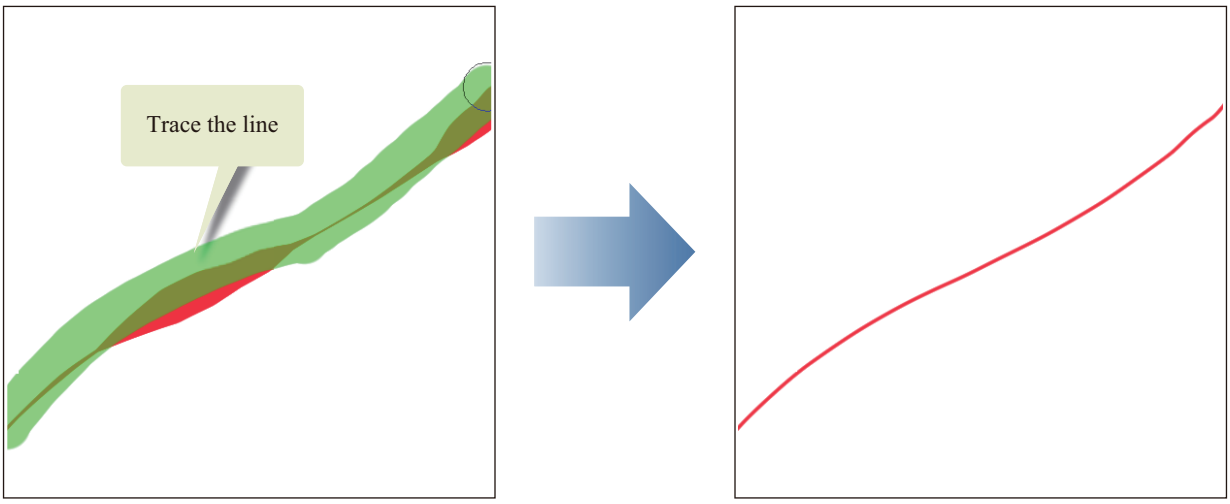
D. Connect vector line

Connects lines drawn separately. Dragging from the end of one line to the end of another line connects them.



E. Correct line width

Dragging over a line as if tracing allows you to scale up/down the line width.



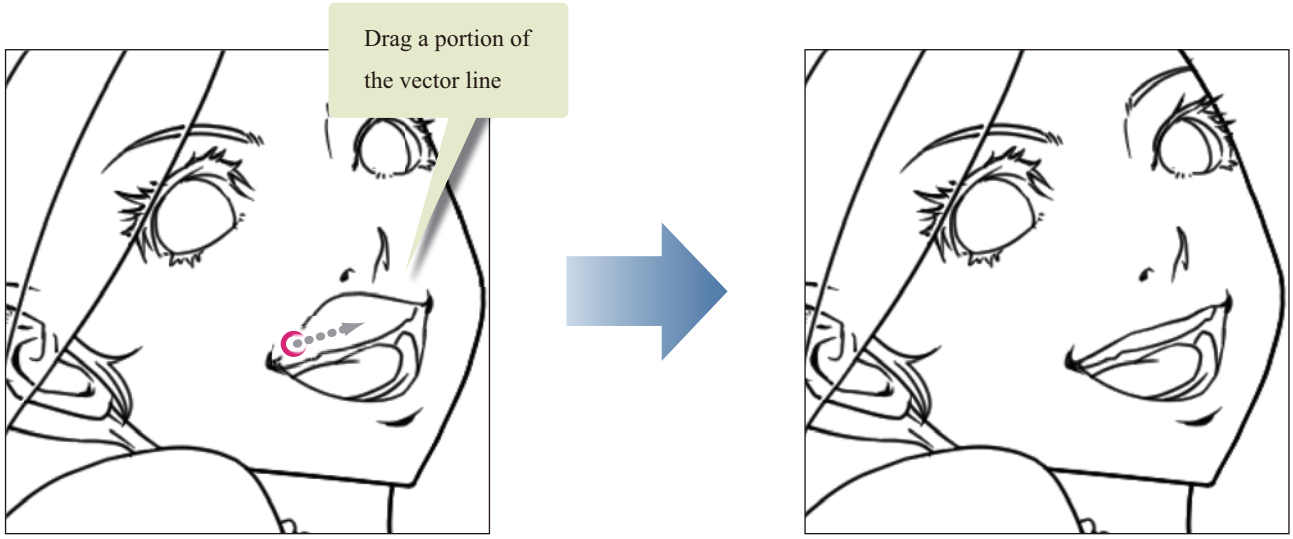
Line width correction (Fix width)

On the [Tool property] palette, you can select ho+w to scale up/down the line width.

(1) Thicken width	Adds the numerically specified line width to the current line width.
(2) Thin width	Subtracts the numerically specified line width from the current line width.
(3) Scale up width	Specifies scale up as a ratio of the current line width.
(4) Scale down width	Specifies scale down as a ratio of the current line width.
(5) Fix width	Changes the line width to the specified value.

F. Redraw vector line

Allows you to transform a line by dragging a portion of the vector line.



The brush size can be adjusted with the [Tool property] palette.

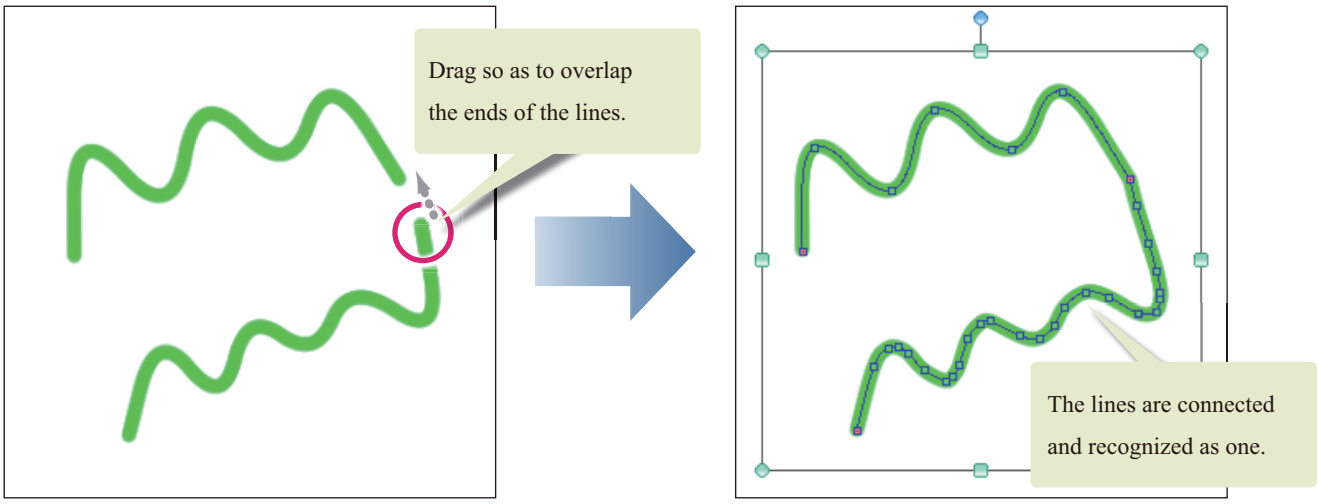
(1) Fix end

Allows you to select whether or not and how to fix the starting point and/or end point when transforming a line.

Fix both ends	Fixes both starting and end points of the line. The starting point and end point do not move even if the line is redrawn.
Fix either end	Fixes the opposite end from the point where the line will be reshaped. The end that is fixed does not move even if the line is redrawn.
Free both ends	Both starting point and end point of the line can move.

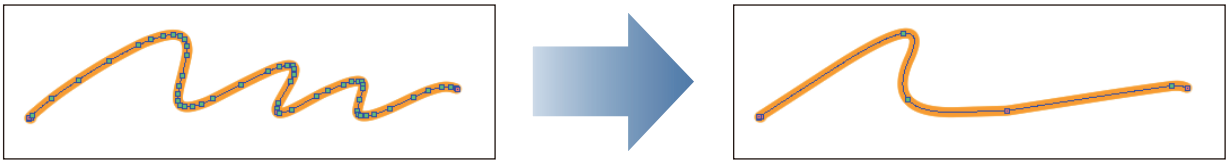
(2) Connect line

When turned on, connects two neighboring segments of lines with the same pen tip shape, size and angle setting. Dragging in such a way as to overlap the ends of both segments when redrawing a line, connects the two segments.



(3) Simplify

When turned on, allows you to simplify a line by reducing the number of control points. A slider allows you to configure how much control points to reduce. The larger the value, the more control points will be removed.

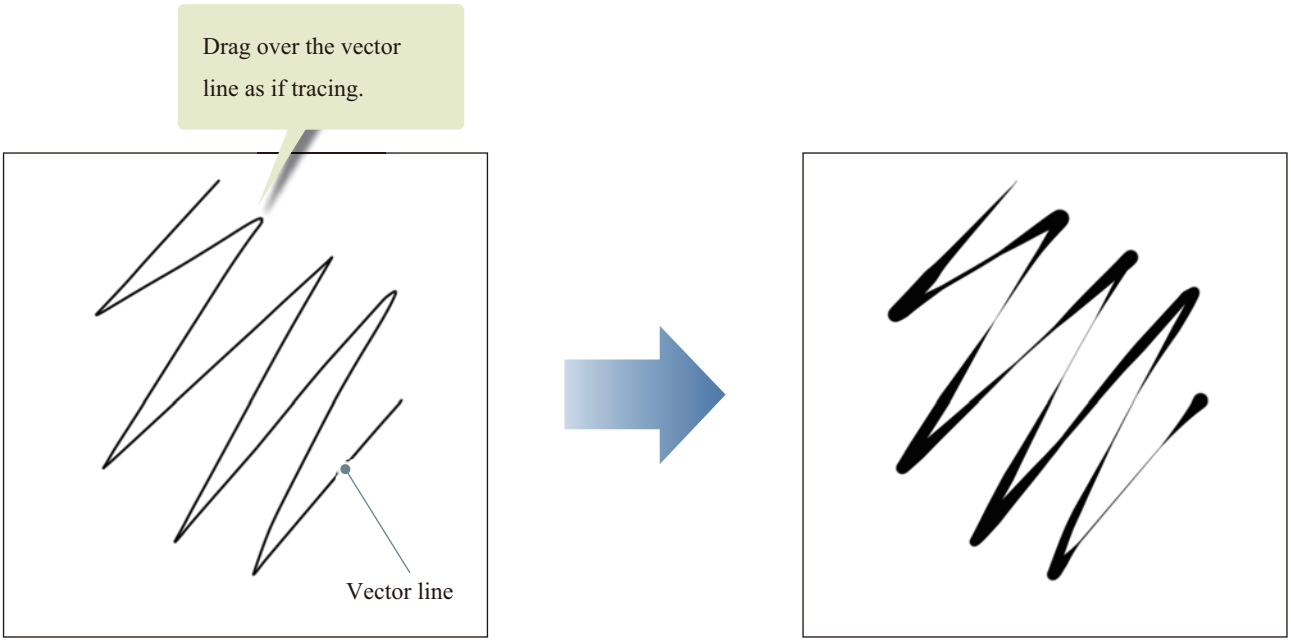


(4) Stabilization

Configures stabilization of lines drawn on the tablet. The larger the value, the smoother will be the line and the smaller the value, the closer will be to the input.

G. Redraw vector line width

Allows you to change the line width by dragging over the vector line as if tracing. Furthermore, if [Pen pressure] is configured for [Affected by] on the [Tool property] palette for the brush size, you can adjust the line width by adjusting the pen pressure.



The brush size can be adjusted with the [Tool property] palette.

(1) Brush size

Configures the drawing size. A slider allows you to change the setting. You can also change the setting by using the up and down arrow icons next to the value box. The [Affected by] button allows you to select the settings of the tablet and the like which affect the drawing size.

Memo

For details on [Affected by], see "Manga Studio 5.0 Tool Setting Guide".

New correction layer

The correction layer is created above the selected layer. Adjusts the brightness, hue, saturation, luminosity, gradation and the like of layers below the correction layer.

Characteristics of the Correction Layer

The correction layer has the following characteristics:

- The effect applies to layers below the created correction layer.
- If the correction layer is created inside a layer folder, the effect applies up to the bottommost layer in the layer folder.
- Effects other than [Reverse gradient] can be re-edited by double clicking the correction layer.
- A layer mask is created in the correction layer. You can adjust the strength of the effect by drawing and erasing on the layer mask.
- Deleting the correction layer restores the original state as effects are not directly applied to the drawing layer.

Types of Correction Layer

The types of correction layers you can create are as follows.

Brightness/Contrast	Adjusts the brightness and contrast of an image.
Hue/Saturation/Luminosity	Adjusts the three components (hue, saturation and value) of the HSV color model.
Posterization	Converts an image into the specified gradation.
Reverse gradient	Inverts the colors in an image.
Level correction	Adjusts the contrast of an image using the histogram.
Tone curve	Adjusts the contrast of an image using the tone curve.
Color balance	Adjusts the tone of an image by configuring the balance of each RGB color.
Binarization	Converts an image into a black and white duotone image.

Correction layer (Brightness/Contrast)

Adjusts the brightness and contrast of an image.

Original image

After applying correction layer (Brightness/Contrast)

1 Select the layer

On the [Layer] palette, select a layer. In this example, the layer at the top is selected.

Memo **The effect applies to layers below the created correction layer.**

2 Create a selection

Create a selection in the area where you want apply the effect.

Memo **If a selection is not created, the effect will apply to the entire canvas.**

3 Select the command

Select [Layer] menu → [New correction layer] → [Brightness/Contrast]. The [Brightness/Contrast] dialog box displays.

4 Configure the effect

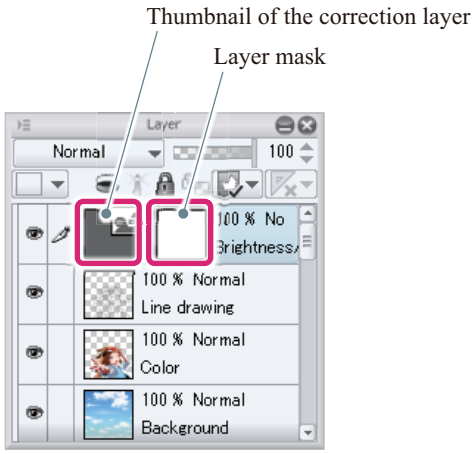
Configure the effect on the [Brightness/Contrast] dialog box.

(1) Configure the brightness and contrast.

(2) Click [OK].

5 The creation of correction layer is complete

The brightness and contrast of layers below the correction layer is now adjusted in accordance with the configured content. A correction layer and a layer mask for the area outside the selected area are created above the currently edited layer.

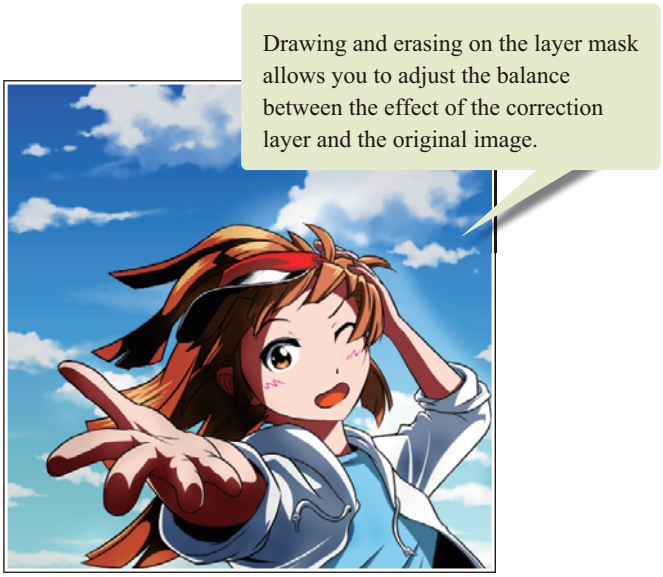


Memo

- **Double clicking the thumbnail of the correction layer reopens the [Brightness/Contrast] dialog box.**
- **Displaying/hiding the correction layer allows you to compare the state before and after applying the effect.**
- **Deleting the correction layer restores the state before applying the effect.**

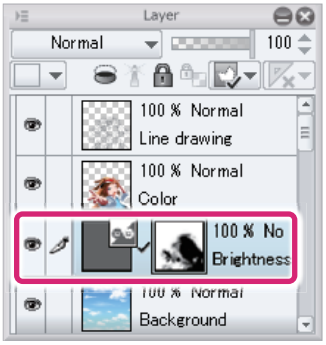
Selecting the layer mask, and drawing and erasing on it allows you to adjust the balance between the effect of the correction layer and original image.

- Cutting the mask with the [Eraser] tool reveals the original image.
- Drawing on the mask with a drawing tool shows the effect of the correction layer.


Drawing and erasing on the layer mask allows you to adjust the balance between the effect of the correction layer and the original image.

Memo **For how to adjust the layer mask, see "Layer mask" .**

Moving the correction layer on the [Layer] palette allows you to change the layer to which the correction applies.



[Brightness/Contrast] Dialog Box

(1) Brightness

Adjust the brightness of the image. The smaller the value, the darker will be the image while the larger the value, the brighter will be the image.

(2) Contrast

Adjust the contrast (difference between light and shadow) of the image. The smaller the value, the lower will be the contrast while the larger the value, the higher will be the contrast.

Correction layer (Hue/Saturation/Luminosity)

Adjusts the three components (hue, saturation and value) of the HSV color model.

Original image

After applying correction layer (Hue/Saturation/Luminosity)

1 Select the layer

On the [Layer] palette, select a layer. In this example, the layer at the top is selected.

Memo **The effect applies to layers below the created correction layer.**

2 Create a selection

Create a selection in the area where you want apply the effect.

Memo **If a selection is not created, the effect will apply to the entire canvas.**

3 Select the command

Select [Layer] menu → [New correction layer] → [Hue/Saturation/Luminosity]. The [Hue/Saturation/Luminosity] dialog box displays.

4 Configure the effect

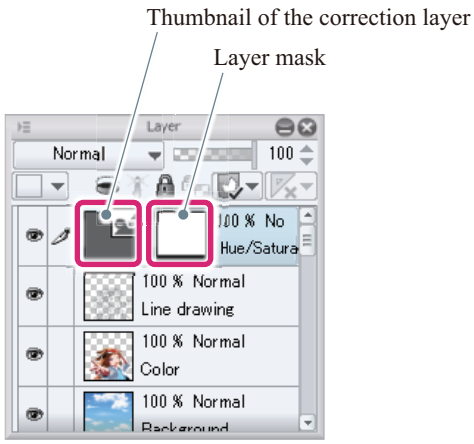
On the [Hue/Saturation/Luminosity] dialog box, configure the effect.

(1) Configure hue, saturation and/or luminosity.

(2) Click [OK].

5 The creation of correction layer is complete

The hue, saturation and/or luminosity of layers below the correction layer are now adjusted in accordance with the configured content. A correction layer and a layer mask for the area outside the selected area are created above the currently edited layer.

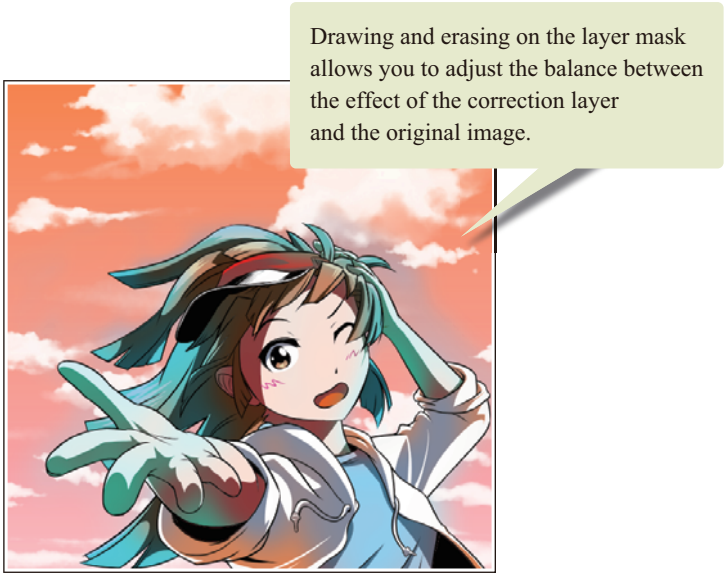


Memo

- **Double clicking the thumbnail of the correction layer reopens the [Hue/Saturation/Luminosity] dialog box.**
- **Displaying/hiding the correction layer allows you to compare the state before and after applying the effect.**
- **Deleting the correction layer restores the state before applying the effect.**

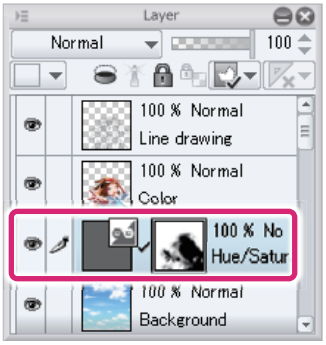
Selecting the layer mask, and drawing and erasing on it allows you to adjust the balance between the effect of the correction layer and original image.

- Cutting the mask with the [Eraser] tool reveals the original image.
- Drawing on the mask with a drawing tool shows the effect of the correction layer.


Drawing and erasing on the layer mask allows you to adjust the balance between the effect of the correction layer and the original image.

Memo For how to adjust the layer mask, see "Layer mask" .

Moving the correction layer on the [Layer] palette allows you to change the layer to which the correction applies.



[Hue/Saturation/Luminosity] Dialog Box

(1) Hue

Indicates gradation of color. Adjusts color types such as red, blue and yellow.

(2) Saturation

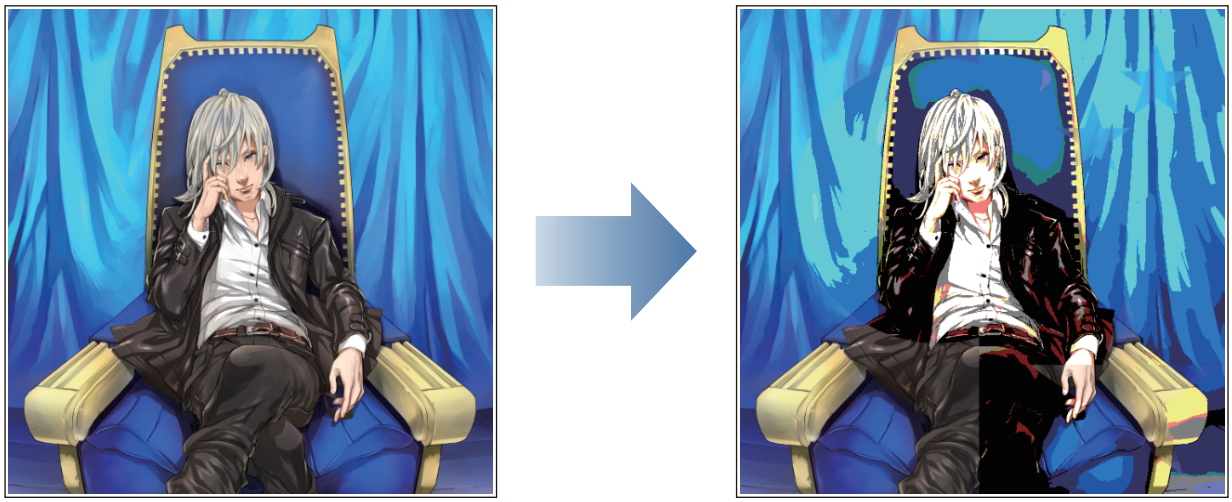
Adjusts the vividness of the color. The larger the value, the more vivid will be the color.

(3) Luminosity

Adjusts the brightness of the color. The larger the value, the brighter will be the color.

Correction Layer (Posterization)

Converts an image into the specified gradation.



Original image　　After applying correction layer (Posterization)

1 Select the layer

On the [Layer] palette, select a layer. In this example, the layer at the top is selected.

Memo　**The effect applies to layers below the created correction layer.**

2 Create a selection

Create a selection in the area where you want apply the effect.

Memo　**If a selection is not created, the effect will apply to the entire canvas.**

3 Select the command

Select [Layer] menu → [New correction layer] → [Posterization]. The [Posterization] dialog box displays.

4 Configure the effect

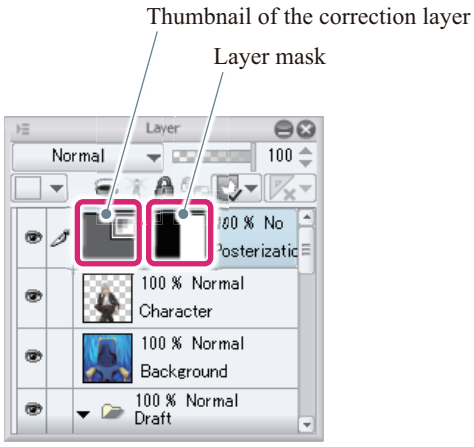
On the [Posterization] dialog box, configure the effect.

(1) Configure the gradation.

(2) Click [OK].

5 The creation of correction layer is complete

The gradation of layers below the correction layer is now adjusted in accordance with the configured content. A correction layer and a layer mask for the area outside the selected area are created above the currently edited layer.

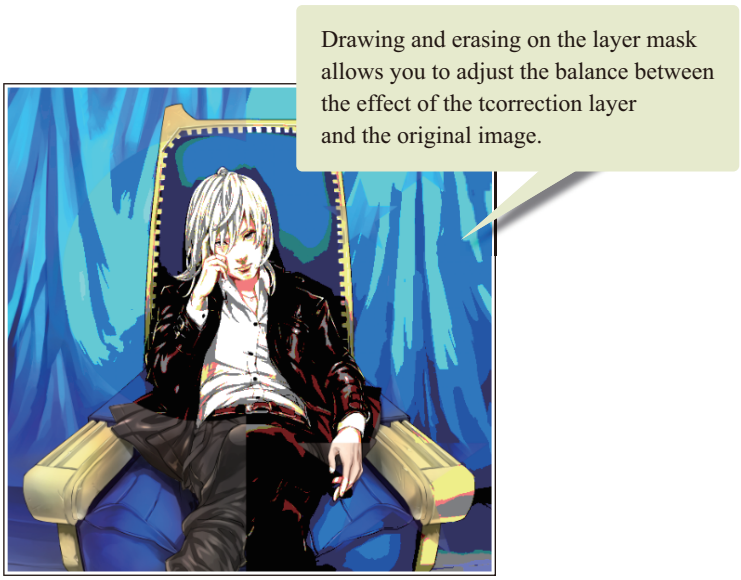


Memo

- **Double clicking the thumbnail of the correction layer reopens the [Posterization] dialog box.**
- **Displaying/hiding the correction layer allows you to compare the state before and after applying the effect.**
- **Deleting the correction layer restores the state before applying the effect.**

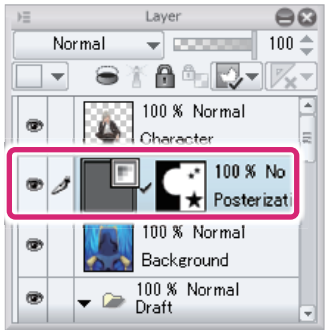
Selecting the layer mask, and drawing and erasing on it allows you to adjust the balance between the effect of the correction layer and original image.

- Cutting the mask with the [Eraser] tool reveals the original image.
- Drawing on the mask with a drawing tool shows the effect of the correction layer.


Drawing and erasing on the layer mask allows you to adjust the balance between the effect of the tcorrection layer and the original image.

Memo **For how to adjust the layer mask, see "Layer mask" .**

Moving the correction layer on the [Layer] palette allows you to change the layer to which the correction applies.



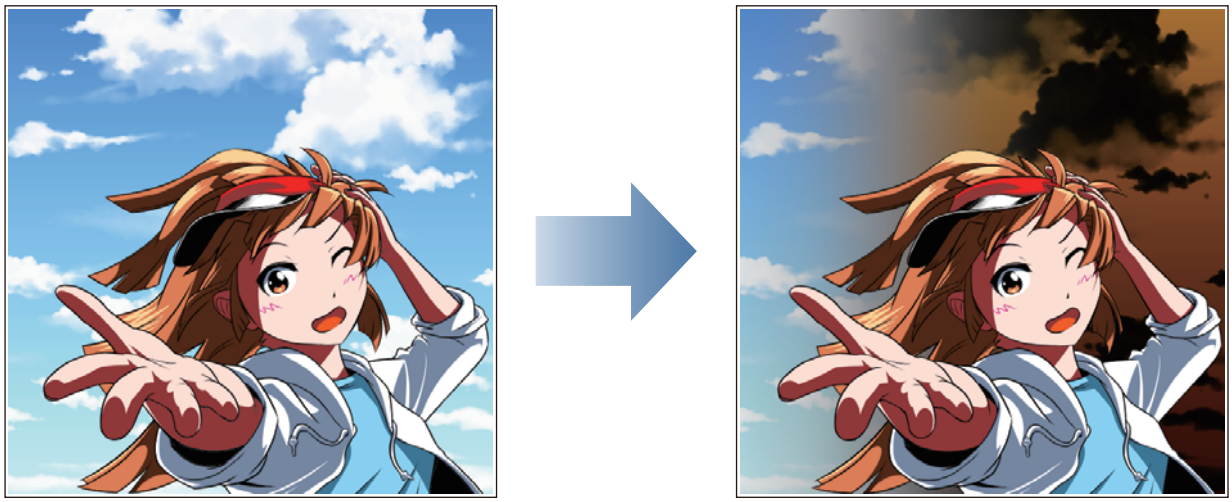
[Posterization] Dialog Box

(1) Number of gradations

Configure the number of posterization levels.

Correction Layer (Reverse gradient)

Inverts the colors in an image.



Original image　　After applying correction layer (Reverse gradient)

1 Select the layer

On the [Layer] palette, select a layer. In this example, the layer at the top is selected.

Memo　**The effect applies to layers below the created correction layer.**

2 Create a selection

Create a selection in the area where you want apply the effect.

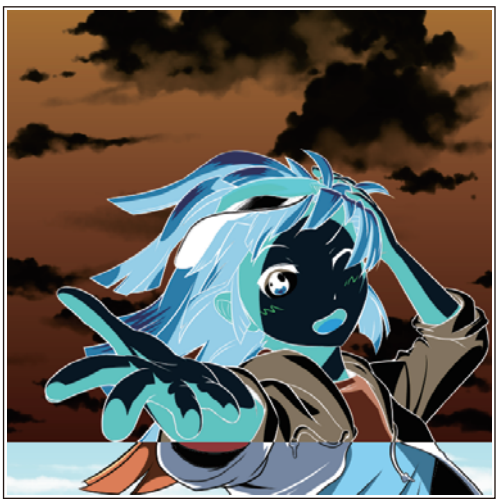
Memo　**If a selection is not created, the effect will apply to the entire canvas.**

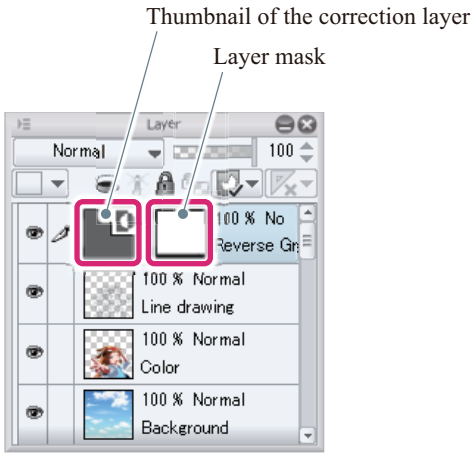
3 Select the command

Select [Layer] menu → [New correction layer] → [Reverse gradient].

4 The creation of correction layer is complete

The color in layers below the correction layer are inverted. A correction layer and a layer mask for the area outside the selected area are created above the currently edited layer.



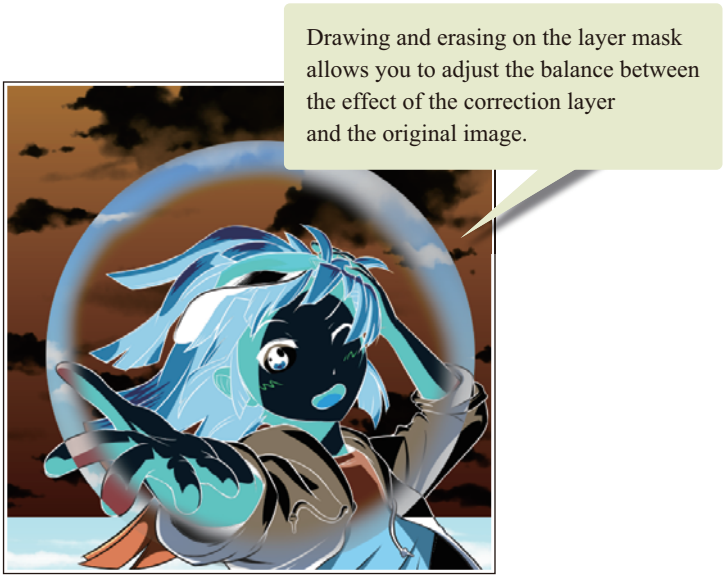


Memo

- **Displaying/hiding the correction layer allows you to compare the state before and after applying the effect.**
- **Deleting the correction layer restores the state before applying the effect.**

Selecting the layer mask, and drawing and erasing on it allows you to adjust the balance between the effect of the correction layer and original image.

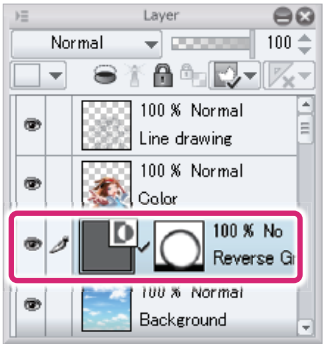
- Cutting the mask with the [Eraser] tool reveals the original image.
- Drawing on the mask with a drawing tool shows the effect of the correction layer.


Drawing and erasing on the layer mask allows you to adjust the balance between the effect of the correction layer and the original image.

Memo

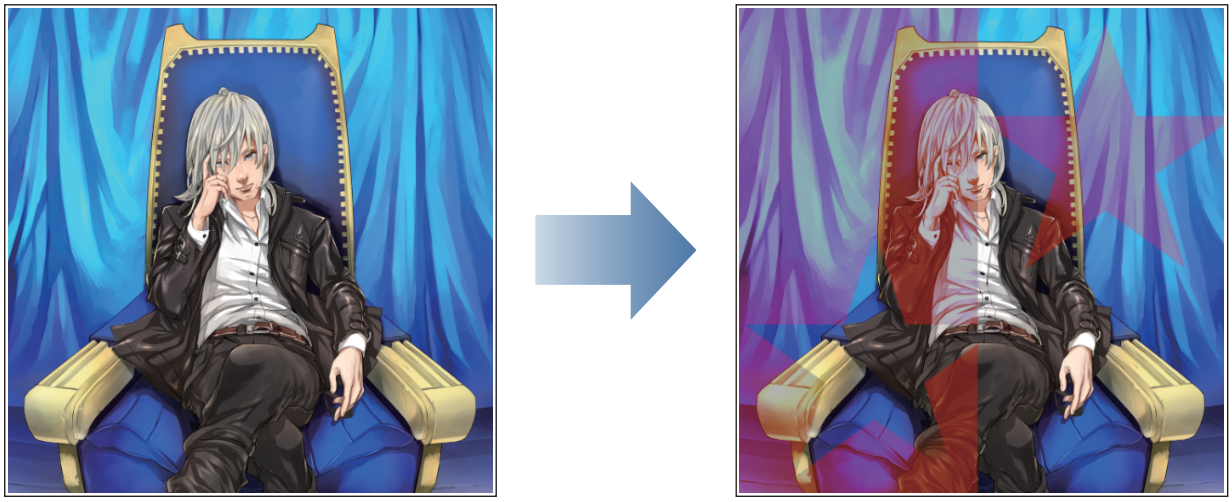
For how to adjust the layer mask, see "Layer mask" .

Moving the correction layer on the [Layer] palette allows you to change the layer to which the correction applies.



Correction Layer (Level correction)

Adjusts the contrast of an image using the histogram.



Original image　　After applying correction layer (Level correction)

1 Select the layer

On the [Layer] palette, select a layer. In this example, the layer at the top is selected.

Memo　**The effect applies to layers below the created correction layer.**

2 Create a selection

Create a selection in the area where you want apply the effect.

Memo　**If a selection is not created, the effect will apply to the entire canvas.**

3 Select the command

Select [Layer] menu → [New correction layer] → [Level correction]. The [Level correction] dialog box displays.

4 Configure the effect

On the [Level correction] dialog box, configure the effect.

(1) Select the channel whose brightness you want to adjust.

(2) Move the triangular [control point] at the base of the histogram to adjust the brightness of the image.

(3) Move the [control point] below [Output] to adjust the intensity of the brightest point and that of the darkest point in the image.

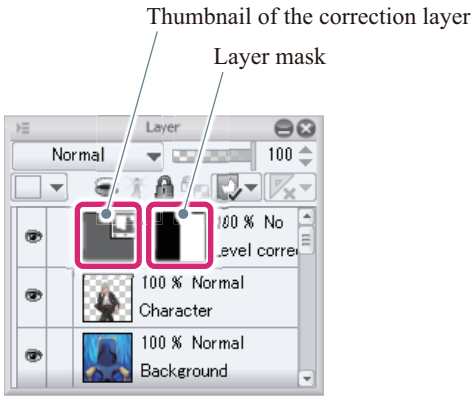
(4) Click [OK].

Memo

If either edge of the mountain in the histogram does not reach the range edge, move the control point to the edge of the mountain on that side. To correct the entire image, adjust in such a way as to spread the mountain across the entire histogram range.

5 The creation of correction layer is complete

The contrast of layers below the correction layer is now adjusted in accordance with the configured content. A correction layer and a layer mask for the area outside the selected area are created above the currently edited layer.

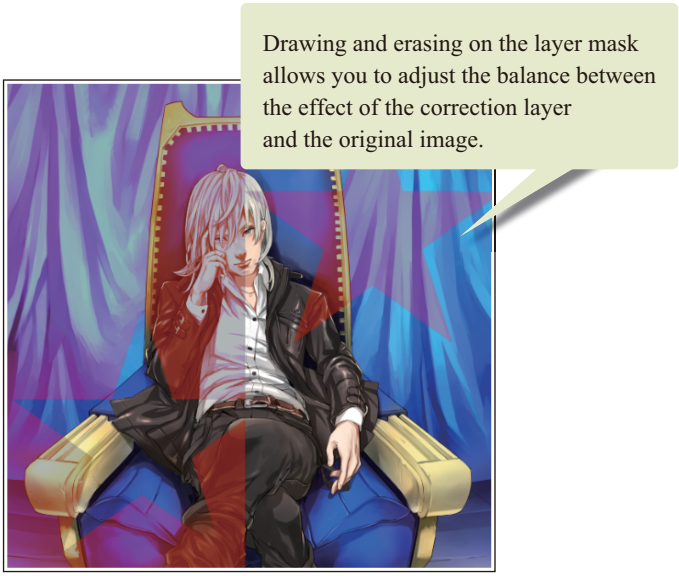


Memo

- **Double clicking the thumbnail of the correction layer reopens the [Level correction] dialog box.**
- **Displaying/hiding the correction layer allows you to compare the state before and after applying the effect.**
- **Deleting the correction layer restores the state before applying the effect.**

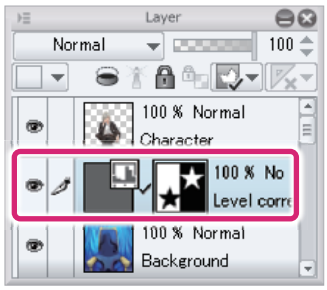
Selecting the layer mask, and drawing and erasing on it allows you to adjust the balance between the effect of the correction layer and original image.

- Cutting the mask with the [Eraser] tool reveals the original image.
- Drawing on the mask with a drawing tool shows the effect of the correction layer.


Drawing and erasing on the layer mask allows you to adjust the balance between the effect of the correction layer and the original image.

Memo **For how to adjust the layer mask, see "Layer mask" .**

Moving the correction layer on the [Layer] palette allows you to change the layer to which the correction applies.



[Level correction] Dialog Box

(1) Channel

Select the channel whose level you want to correct from [RGB], [Red], [Green] and [Blue].

(2) Histogram

A graph where the information volume of the dark area (left side) and that of the bright area (right side) display as a mountain-like shape.

(3) Shadow input

Configure the darkest point in the image.

Normally place the darkest point on the left base of the mountain in the [Histogram].

(4) Gamma input

Configure the mean brightness of the image.

(5) Highlight input

Configure the brightest point in the image.

Normally place the brightest point on the right base of the mountain in the [Histogram].

(6) Shadow output

Configure the intensity of the darkest point in the image.

(7) Highlight output

Configure the intensity of the brightest point in the image.

Correction Layer (Tone curve)

Adjusts the contrast of an image using the tone curve.

Original image　　After applying correction layer (Tone curve)

1 Select the layer

On the [Layer] palette, select a layer. In this example, the layer at the top is selected.

Memo　**The effect applies to layers below the created correction layer.**

2 Create a selection

Create a selection in the area where you want apply the effect.

Memo　**If a selection is not created, the effect will apply to the entire canvas.**

3 Select the command

Select [Layer] menu → [New correction layer] → [Tone curve]. The [Tone curve] dialog box displays.

4 Configure the effect

On the [Tone curve] dialog box, configure the effect.

(1) Select the channel to adjust.

(2) Click on the curve to add a control point. Drag the control point to modify the curve and adjust.

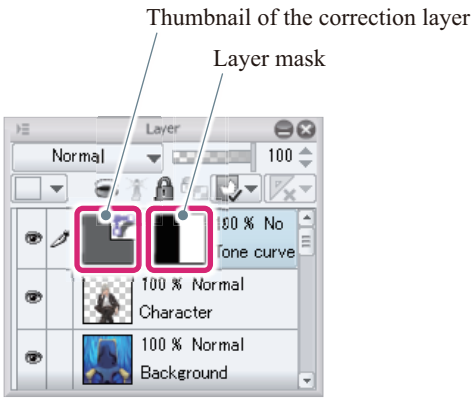
(3) Click [OK].

Memo

- **To delete a control point, drag it outside the graph.**
- **The horizontal axis of the graph is the "input" value (original brightness) and the vertical axis, the "output" value (brightness after adjustment).**
- **In the background of the graph, the information volume of the dark area (left side) and that of the bright area (right side) of the original image are displayed as a mountain-like graph (histogram). Adjust the tone curve by checking the exposure balance of the original image in the histogram.**

5 The creation of correction layer is complete

The contrast of layers below the correction layer is now adjusted in accordance with the configured content. A correction layer and a layer mask for the area outside the selected area are created above the currently edited layer.

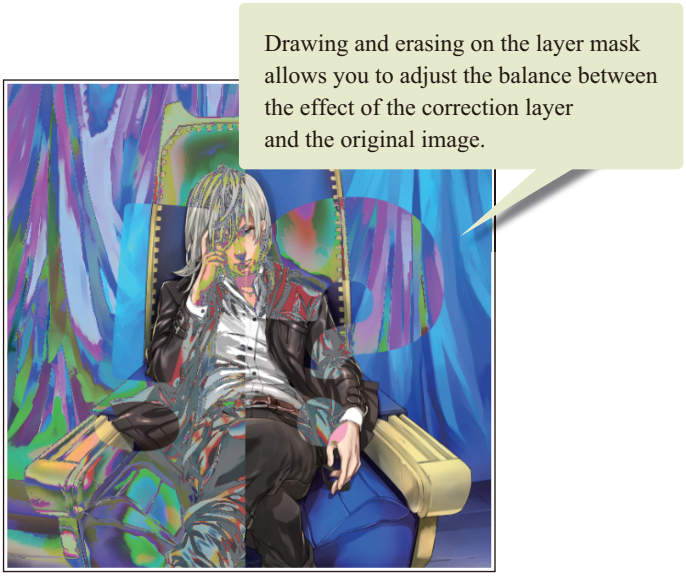


Memo

- **Double clicking the thumbnail of the correction layer reopens the [Tone curve] dialog box.**
- **Displaying/hiding the correction layer allows you to compare the state before and after applying the effect.**
- **Deleting the correction layer restores the state before applying the effect.**

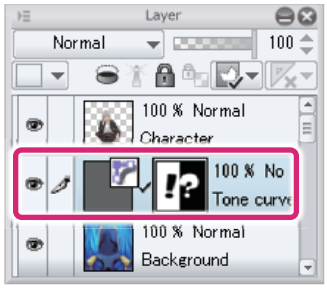
Selecting the layer mask, and drawing and erasing on it allows you to adjust the balance between the effect of the correction layer and original image.

- Cutting the mask with the [Eraser] tool reveals the original image.
- Drawing on the mask with a drawing tool shows the effect of the correction layer.


Drawing and erasing on the layer mask allows you to adjust the balance between the effect of the correction layer and the original image.

Memo **For how to adjust the layer mask, see "Layer mask" .**

Moving the correction layer on the [Layer] palette allows you to change the layer to which the correction applies.



[Tone curve] Dialog Box

(1) Channel

Select the channel whose contrast you want to correct from [RGB], [Red], [Green] and [Blue].

(2) Tone curve

A graph to adjust the contrast of the image. Drag the control point to adjust.

The horizontal axis of the graph is the "input" value (original brightness) and the vertical axis, the "output" value (brightness after adjustment).

Memo

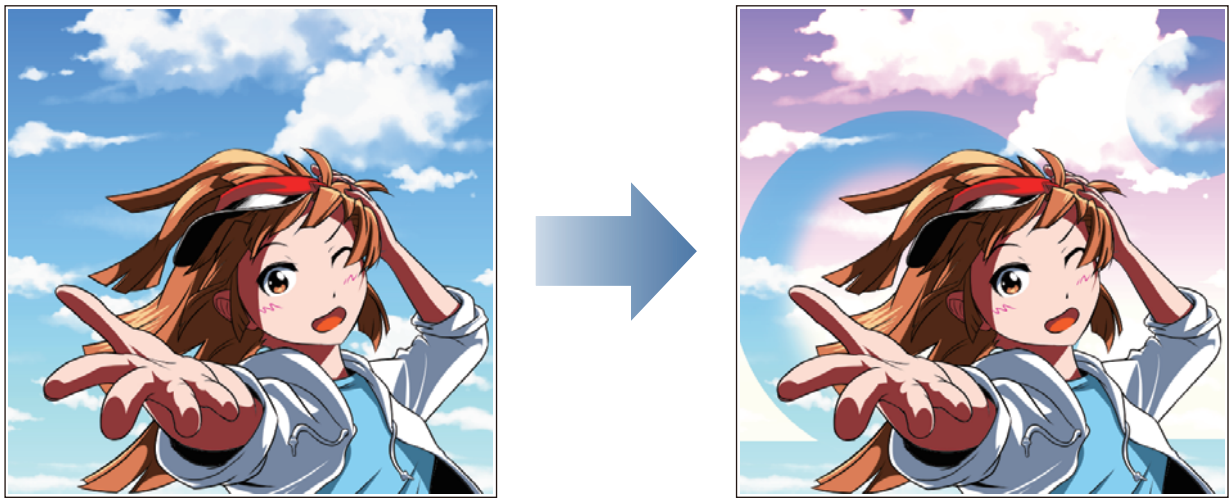
In the background of the graph, the information volume of the dark area (left side) and that of the bright area (right side) of the original image are displayed as a mountain-like graph (histogram). Adjust the tone curve by checking the exposure balance of the original image in the histogram.

(3) Reset

Initializes the settings.

Correction layer (Color balance)

Adjusts the tone of an image by configuring the balance of each RGB color.



Original image　　After applying correction layer (Color balance)

1 Select the layer

On the [Layer] palette, select a layer. In this example, the layer at the top is selected.

Memo　**The effect applies to layers below the created correction layer.**

2 Create a selection

Create a selection in the area where you want apply the effect.

Memo　**If a selection is not created, the effect will apply to the entire canvas.**

3 Select the command

Select [Layer] menu → [New correction layer] → [Color balance]. The [Color balance] dialog box displays.

4 Configure the effect

On the [Color balance] dialog box, configure the effect.

(1) From [Gradation balance], select the item to adjust. You can configure color balance by item.

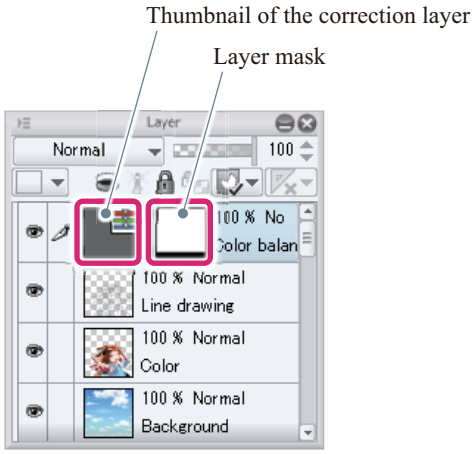
(2) Adjust the color by moving the [Color balance] sliders. You may also input the values in the [Color level] fields.

(3) If [Preview] is turned on, you can preview the settings on the canvas.

(4) Click [OK].

5 The creation of correction layer is complete

The contrast of layers below the correction layer is now adjusted in accordance with the configured content. A correction layer and a layer mask for the area outside the selected area are created above the currently edited layer.

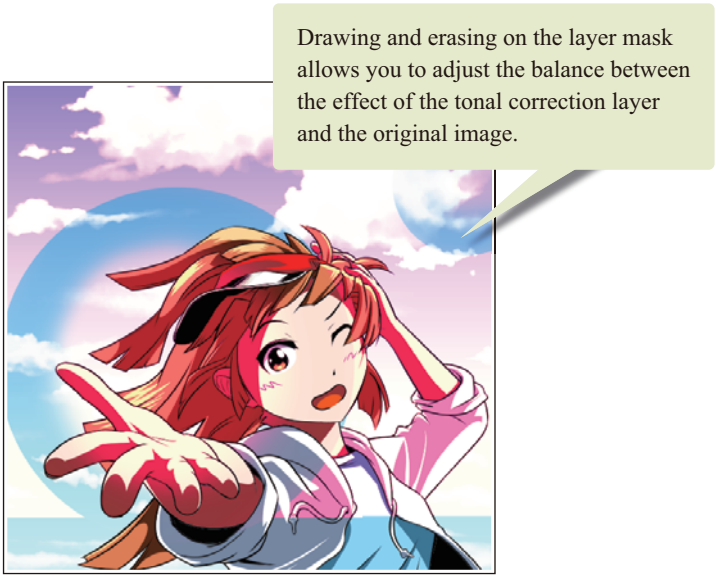


Memo

- **Double clicking the thumbnail of the correction layer reopens the [Color balance] dialog box.**
- **Displaying/hiding the correction layer allows you to compare the state before and after applying the effect.**
- **Deleting the correction layer restores the state before applying the effect.**

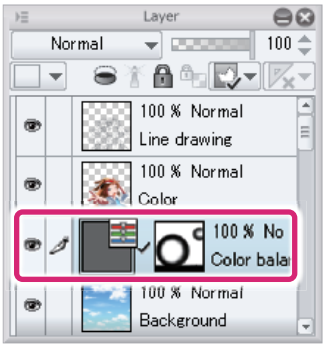
Selecting the layer mask, and drawing and erasing on it allows you to adjust the balance between the effect of the correction layer and original image.

- Cutting the mask with the [Eraser] tool reveals the original image.
- Drawing on the mask with a drawing tool shows the effect of the correction layer.


Drawing and erasing on the layer mask allows you to adjust the balance between the effect of the tonal correction layer and the original image.

Memo For how to adjust the layer mask, see "Layer mask" .

Moving the correction layer on the [Layer] palette allows you to change the layer to which the correction applies.



[Color balance] Dialog Box

(1) Color balance

Adjust the color balance of the image with the sliders. When the [Cyan/Red], [Magenta/Green] and [Yellow/Blue] sliders are moved to the right, the colors respectively become more red, green and blue while they respectively become more cyan, magenta and yellow when moved to the left.

The value of each slider is displayed in [Color level]. From left to right, they are the current values of [Cyan/Red], [Magenta/Green] and [Yellow/Blue]. You can also adjust by inputting values in there.

(2) Gradation balance

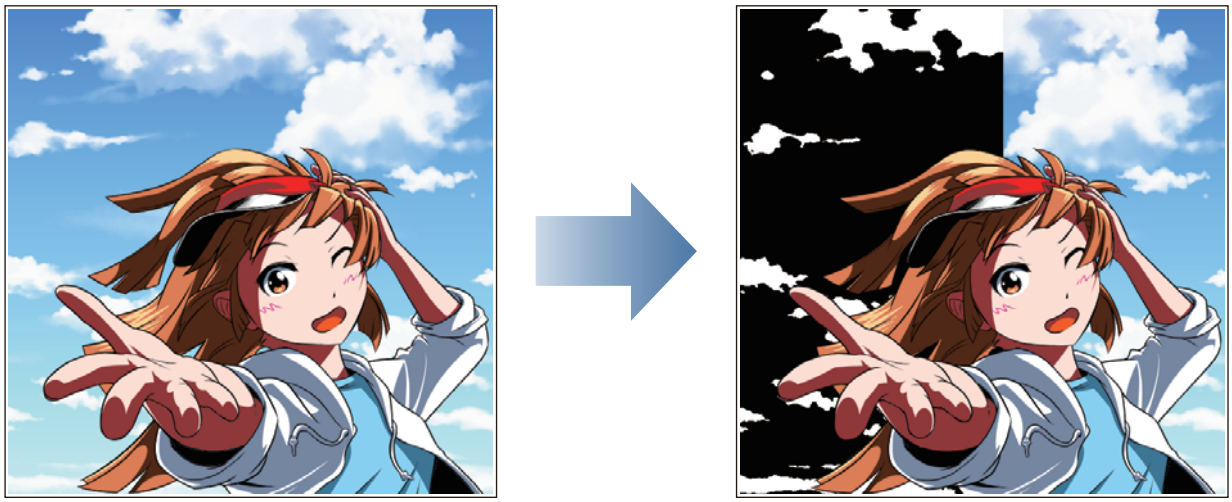
Select the gradation balance for the image from [Shadow], [Half tone] and [Highlight]. You can adjust the color balance for each gradation as the settings are managed separately.

(3) Keep brightness

Keeps the brightness when gradation is adjusted.

Correction Layer (Binarization)

Converts an image into a black and white duotone image.



Original image　　After applying correction layer (Binarization)

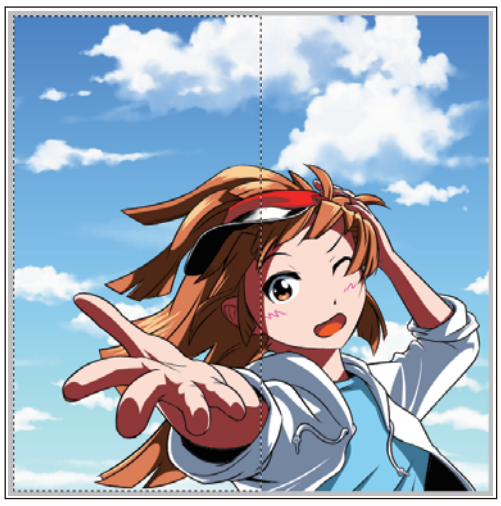
1 Select the layer

On the [Layer] palette, select a layer. In this example, the [Background] layer is selected.

Memo　**The effect applies to layers below the created correction layer.**

2 Create a selection

Create a selection in the area where you want apply the effect.



Memo　**If a selection is not created, the effect will apply to the entire canvas.**

3 Select the command

Select [Layer] menu → [New correction layer] → [Binarization]. The [Binarization] dialog box displays.

4 Configure the effect

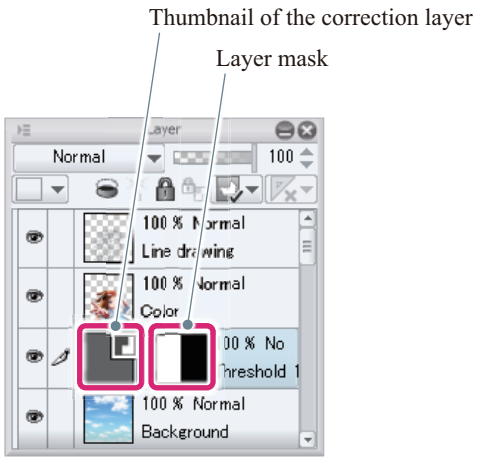
On the [Binarization] dialog box, configure the effect.

(1) Adjust the black and white balance of the image by moving the slider.

(2) Click [OK].

5 The creation of correction layer is complete

The images on layers below the correction layer are now converted into black and white duotone images in accordance with the configured content. A correction layer and a layer mask for the area outside the selected area are created above the currently edited layer.



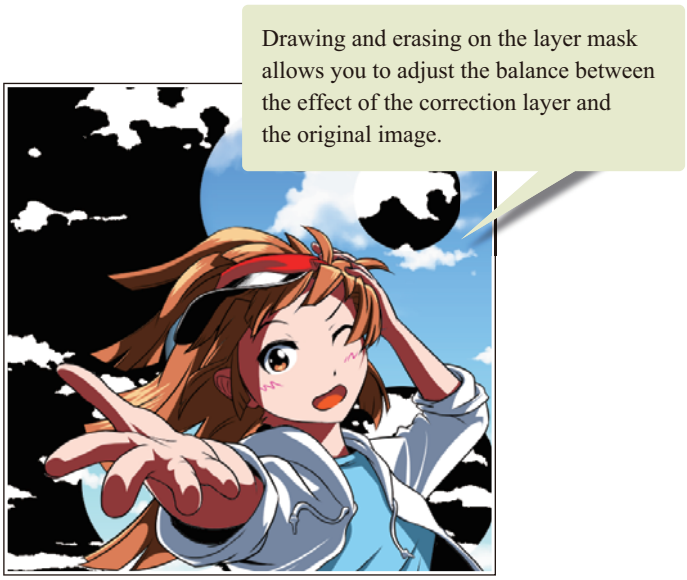
Memo

Double clicking the thumbnail of the correction layer reopens the [Binarization] dialog box.

- **Displaying/hiding the correction layer allows you to compare the state before and after applying the effect.**
- **Deleting the correction layer restores the state before applying the effect.**

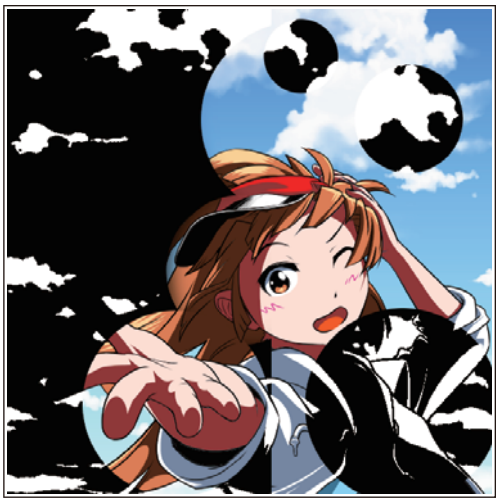
Selecting the layer mask, and drawing and erasing on it allows you to adjust the balance between the effect of the correction layer and original image.

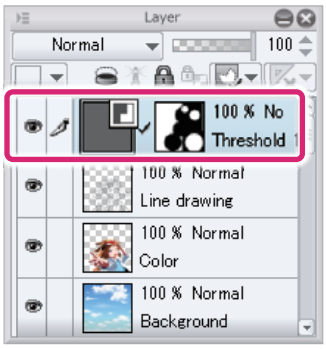
- Cutting the mask with the [Eraser] tool reveals the original image.
- Drawing on the mask with a drawing tool shows the effect of the correction layer.


Drawing and erasing on the layer mask allows you to adjust the balance between the effect of the correction layer and the original image.

Memo For how to adjust the layer mask, see "Layer mask" .

Moving the correction layer on the [Layer] palette allows you to change the layer to which the correction applies.





[Binarization] Dialog Box

(1) Threshold

The color of dots darker than the configured threshold is reduced to black while the color of dots brighter than the configured threshold is reduced to white.

New layer folder

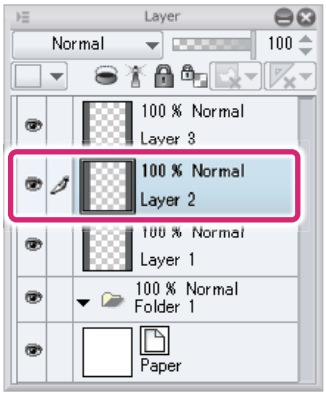
Creates a new layer folder.

Memo

[Layer folder] is a function to group a number of layers in one folder. For example, placing images related to the character and images related to the background in separate folders makes the management of related images easier.

1 Select the layer

On the [Layer] palette, select a layer.

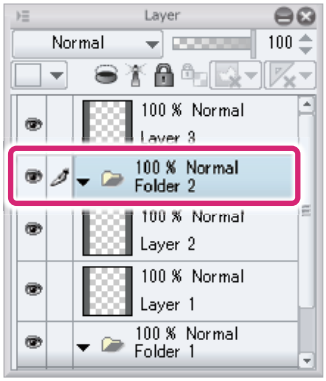


2 Select the command

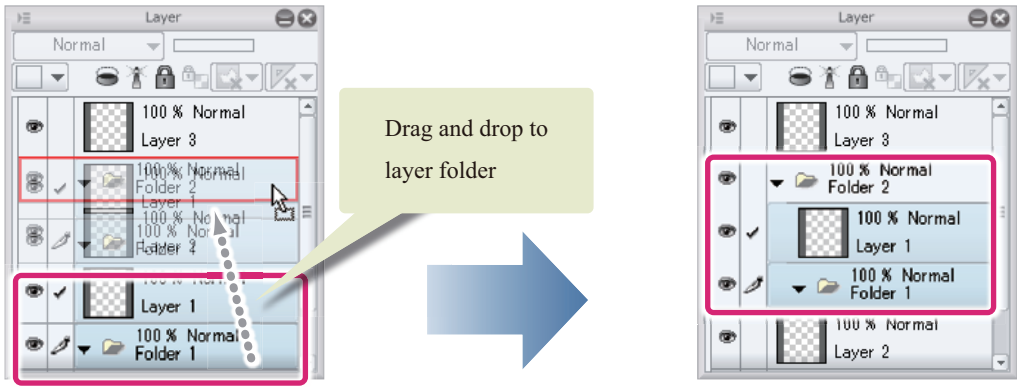
Select [Layer] menu → [New layer folder].

3 The layer folder is created

A new, empty [Layer folder] is created above the selected layer.



Select a layer or a layer folder and drag and drop it into the [Layer folder]. The selected layer or layer folder is stored in the [Layer folder].



Memo

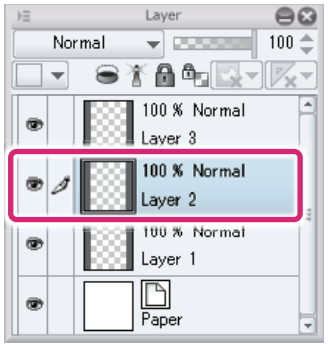
- **To select multiple layers, click the layers while holding the [Ctrl] key down.**
- **To select a group of consecutive layers, click the layers while holding the [Shift] key down.**

Duplicate layer

Makes a copy of the selected layer or layer folder.

1 Select the layer

On the [Layer] palette, select the layer or layer folder to copy.

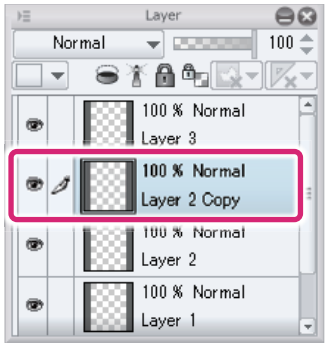


Memo

- **To select multiple layers, click the layers while holding the [Ctrl] key down.**
- **To select a group of consecutive layers, click the layers while holding the [Shift] key down.**

2 Copy the selected layer or layer folder

Selecting [Layer] menu → [Duplicate layer] creates a layer or layer folder named [xx Copy] on the [Layer] palette, where xx is the name of the source layer or layer folder.



Delete layer

Deletes the selected layer or layer folder.

Important

When a layer folder is selected, also the layers stored in the folder are deleted.

Layer mask

Creates a mask for the selected layer or layer folder. Masks can be deleted as well as configured.

Mask outside selection

Masks the area outside of a selected area.

Selecting a layer mask and drawing on the layer mask with a drawing tool cuts those portions of the mask and reveals the images on the layer. Using the [Eraser] tool on drawn portions places a mask on the erased portions. The opacity of the mask will vary depending on the opacity of the tool.

Background image

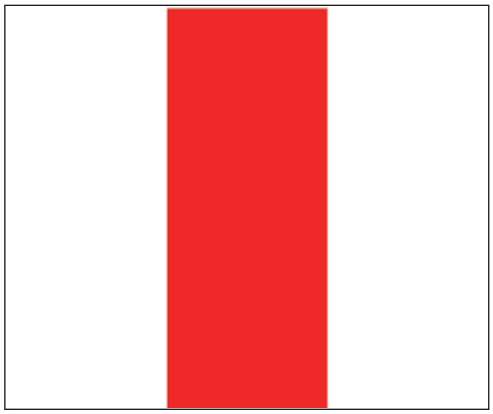
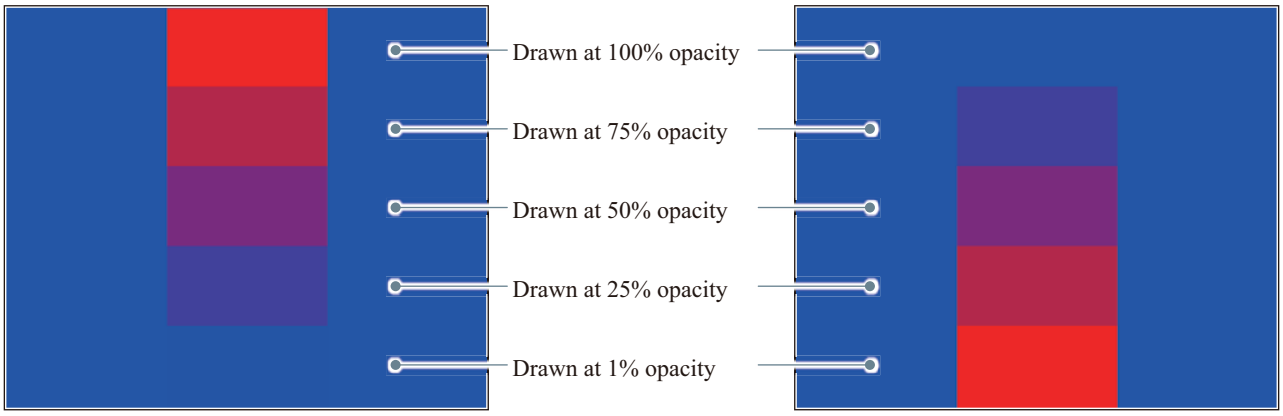


Image on layer to be masked



Drawn on layer mask with drawing-type tool

Drawn on layer mask with [Eraser] tool

1 Create a selection

Using a Marquee tool, create a selection.

Memo

If a selection is not created, the mask applies to the entire layer.

2 Select the layer

On the [Layer] palette, select the layer you want to mask.

3 Select the command

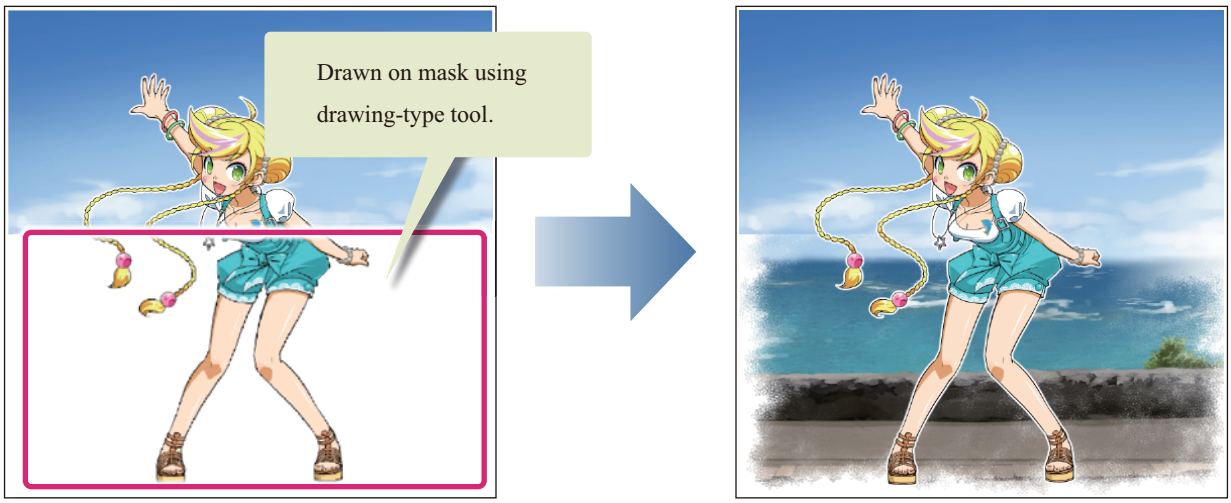
Select [Layer] menu → [Layer mask] → [Mask outside selection]. The area outside of the selected area is masked.

4 Select the layer mask

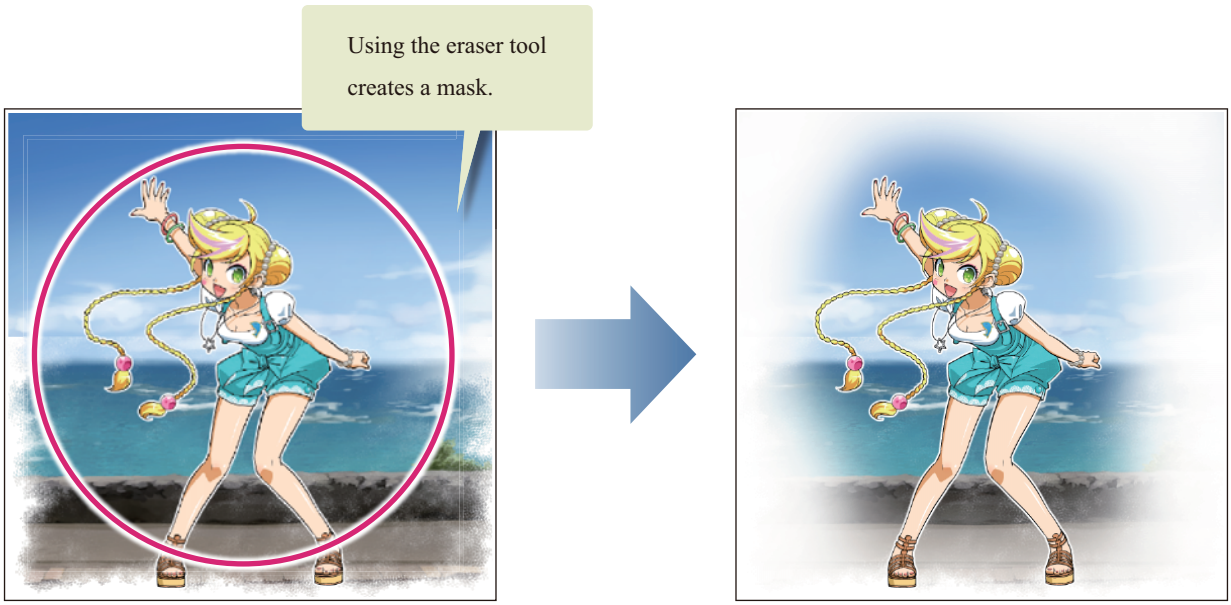
On the [Layer] palette, select the layer mask.

5 Adjust the mask

Using a drawing tool, draw on the mask. The mask is cut and reveals the images on the layer.



Using the [Eraser] tool allows you to create a mask.



Mask selection

Masks a selected area.

Selecting a layer mask and drawing on the layer mask with a drawing tool cuts those portions of the mask and reveals the images on the layer. Using the [Eraser] tool or drawing in transparent color on drawn portions masks those portions. The opacity of the mask will vary depending on the opacity of the tool.

Background image

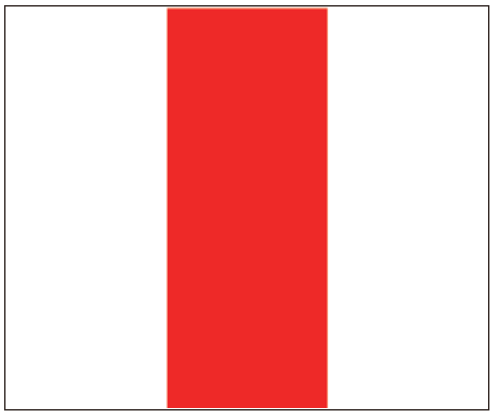
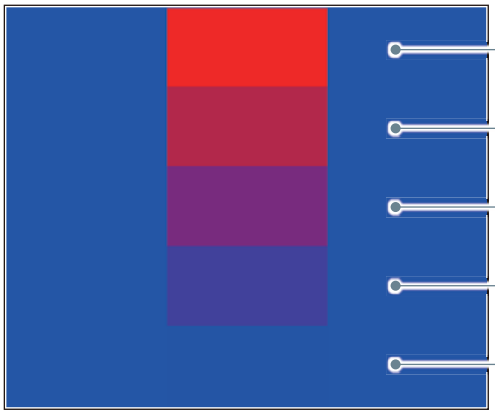
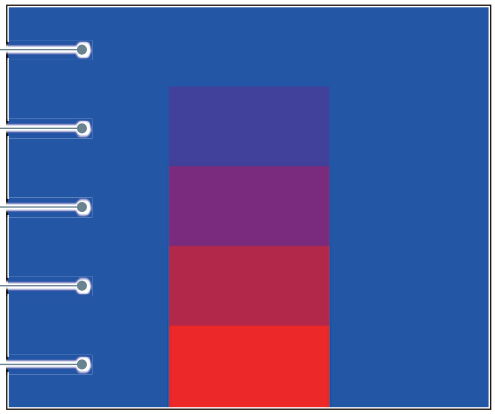


Image on layer to be masked



Drawn on layer mask with [Eraser] tool



Drawn on mask layer with drawing-type tool

1 Create a selection

Using a Marquee tool, create a selection.

Memo

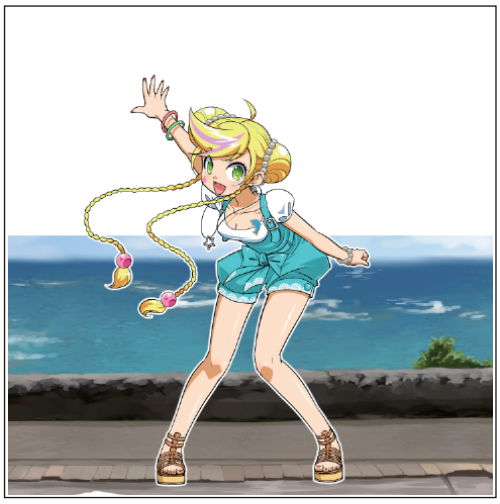
If a selection is not created, an undrawn mask is created.

2 Select the layer

On the [Layer] palette, select the layer you want to mask.

3 Select the command

Select [Layer] menu → [Layer mask] → [Mask selection]. The selected area is masked.

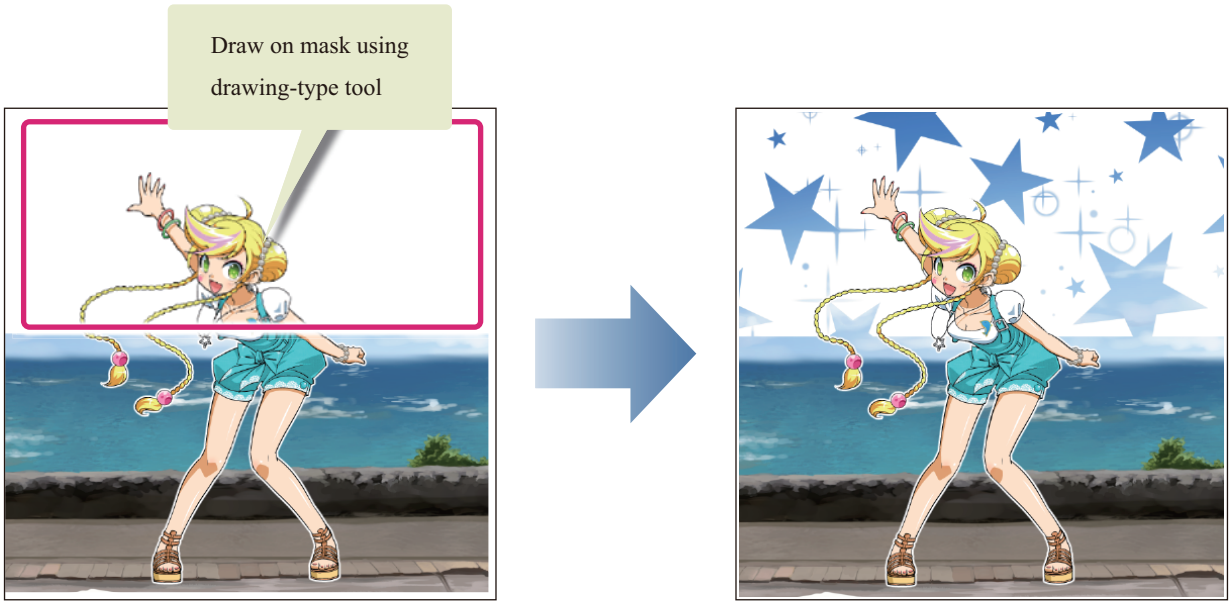


4 Select the layer mask

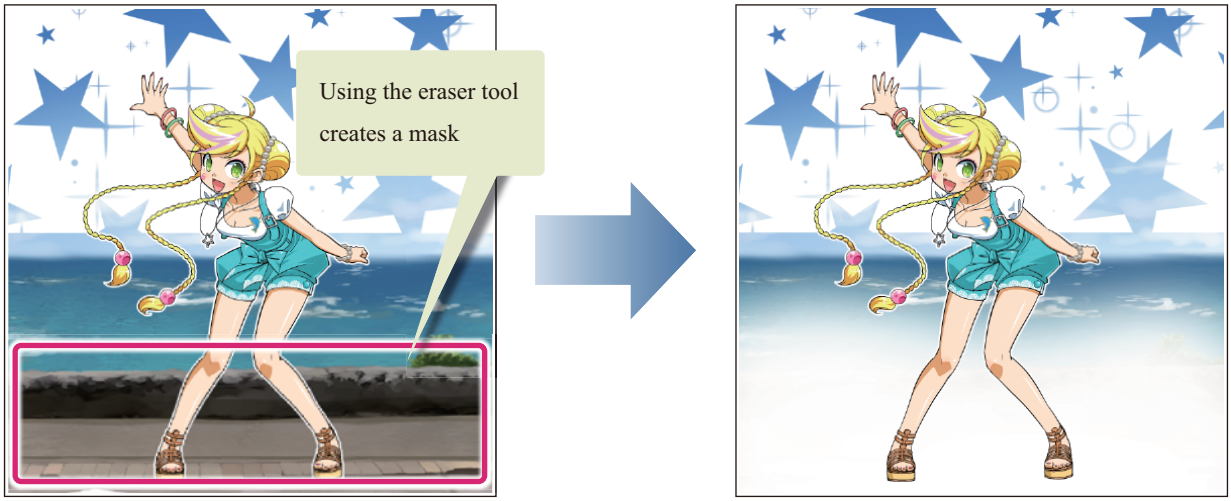
On the [Layer] palette, select the layer mask.

5 Adjust the mask

Using a drawing tool, draw on the mask. The mask is cut and reveals the images on the layer.



Using the [Eraser] tool allows you to create a mask.



Delete mask

Deletes the layer mask of a selected layer.

Apply mask to layer

The image is reverted to its state before masking to delete the mask.

Important **Applying layer mask converts a layer into [Raster] layer.**

Enable mask

Turning on this item by selecting the menu enables the layer mask.

Selecting again the menu turns off this item and disables the layer mask. When the layer mask is disabled, the mask layer on the [Layer] palette is displayed with a red x mark on it.

Show mask area

Turning on this item by selecting the menu displays the masked area in violet.

Show mask area OFF

Show mask area ON

Memo **You can also display/hide the masked area by clicking the layer mask icon while holding the [Alt] key down.**

Link mask to layer

Turning on this item by selecting the menu links the layer and mask. When linked, the mask drawing moves along with the layer when this is moved using the [Layer move] tool.

Selecting again the menu turns off this item and cancels the link between the layer and mask. When not linked, the mask drawing does not move even if the layer is moved using the [Layer move] tool.

When a layer and a mask are linked, a check mark is displayed between the layer and mask icons on the [Layer] palette.

Ruler - Frame

Allows you to perform operations related to ruler/frame border.

- Allows you to divide/integrate frame border.
- Allows you to delete and display rulers, create perspective rulers, and so on. It also allows you to configure whether to move the ruler along with the drawing area of the layer being edited, or separately.

Selection from ruler

Creates a selection from a ruler with a closed shape.

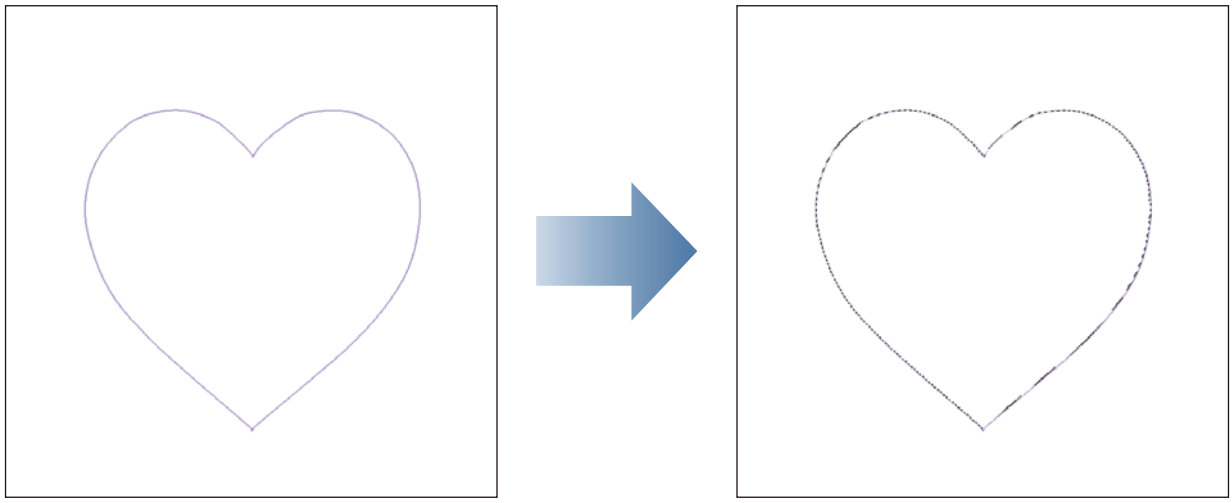
Important **You cannot create a selection from a ruler that does not have a closed shape.**

1 Select the layer

Select a layer including a ruler with a closed shape.

2 The selection is created

Select [Layer] menu → [Ruler] → [Selection from ruler].



Memo **You can also create a selection on the [Layer] palette by clicking the ruler icon while holding down the [Ctrl] key.**

Delete ruler

Deletes the selected ruler.

Memo **If no ruler is selected, deletes all rulers within the currently edited layer.**

Show ruler

Displays/hides the rulers within the currently edited layer.

Link ruler to layer

Allows you to configure whether to move the ruler along with the drawing area of the currently edited layer, or separately.

When turned on, the ruler moves along with the drawing area of the currently edited layer when the [Layer move] tool is used.

When turned off, only the ruler moves when the [Layer move] tool is used.

Create perspective ruler

Allows you to create a ruler for perspective drawing with up to 3 vanishing points.

Memo **For details on perspective rulers, see "Explanation: Perspective ruler" .**

Divide frame border equally

Allows you to divide a frame border equally. Selecting [Frame folder] in the [Layer] palette and the menu item, displays the [Divide frame border equally] dialog box. Allows you to configure the number of divisions/orientation of divided sides of the frame border, folder structure of [Frame folder] after division, etc. on the dialog box.

[Divide frame border equally] dialog box

(1) Number of vertical divisions

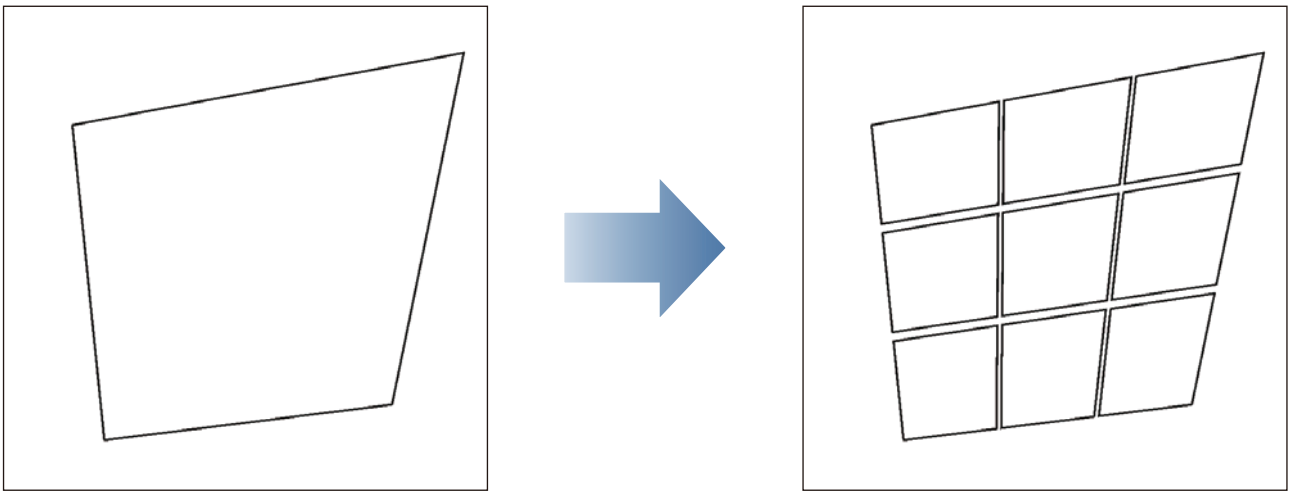
Configures the number of vertical divisions for the frame border.

(2) Number of horizontal divisions

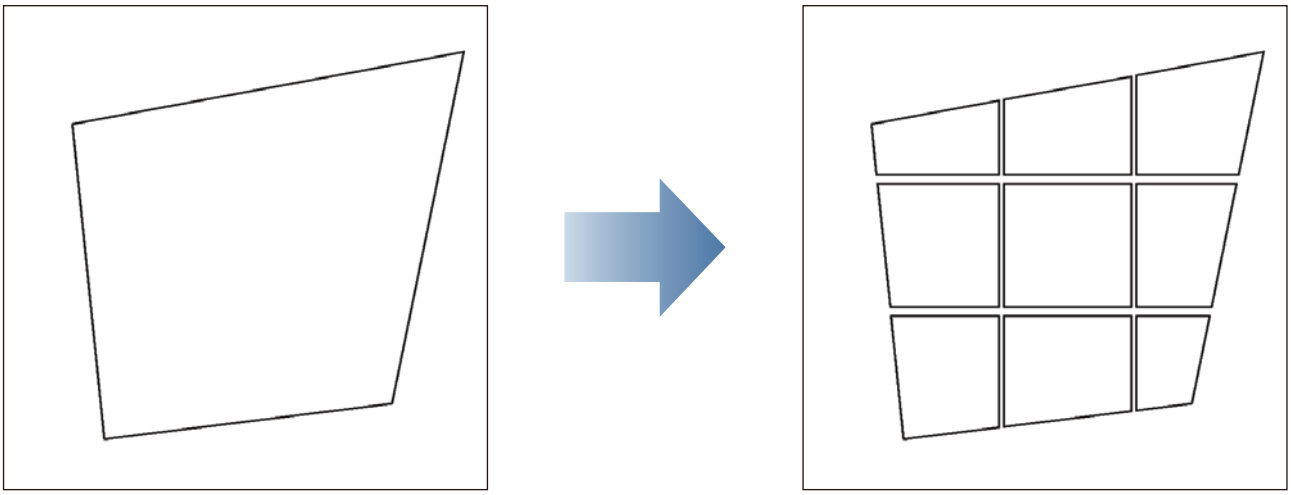
Configures the number of horizontal divisions for the frame border.

(3) Fit to Side Direction of Frame

Configures the orientation of the divided sides.



When turned on, the frame border is divided along the direction of the frame border sides.



When turned off, the frame border is divided vertically/horizontally.

(4) Divide folder

Configures the structure of [Frame folder] after the frame border is divided.

Duplicate layer	The original [Frame folder] is deleted, and a [Frame folder] created for each divided frame border. The images in [Frame folder] before the division are replicated in each [Frame folder] after division.
Create empty folder	The original [Frame folder] is left as it is, and an empty [Frame folder] created for each divided frame border. The images in [Frame folder] before the division remain stored in the original folder.
Not change	Only the frame border is divided with the original [Frame folder] left as it is.

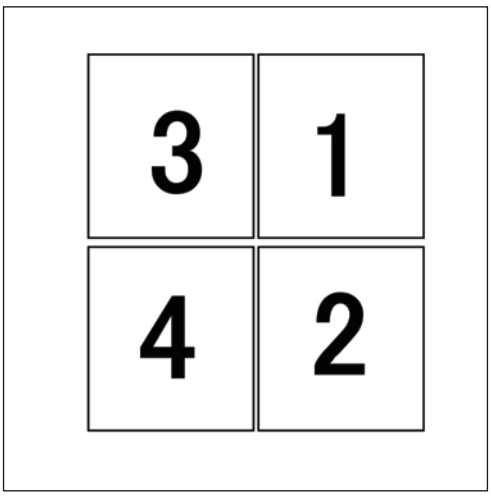
Combine frame

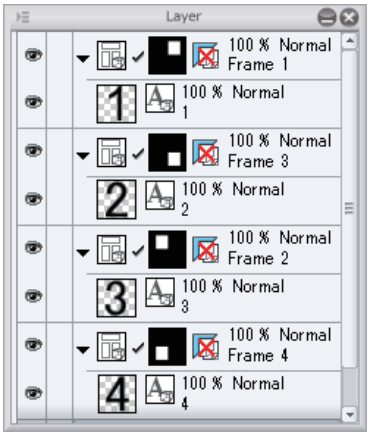
On the [Layer] palette, combines the selected [Frame folders]. Selecting a [Frame folder] on the [Layer] palette and the menu item, displays the [Combine frame] dialog box. Allows you to configure the folder structure of [Frame folder] after combine.

[Combine frame] dialog box

(1) Combine folder

Configures the structure of [Frame folder] after combine.

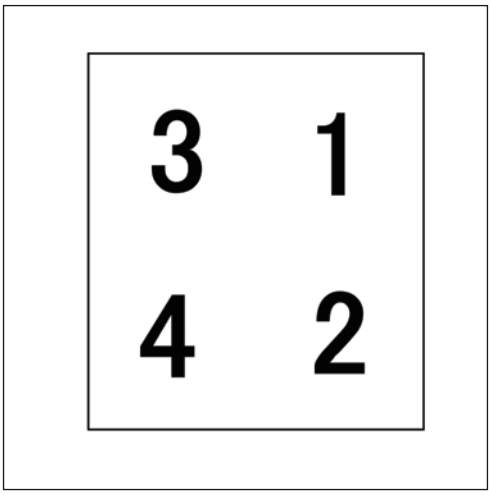


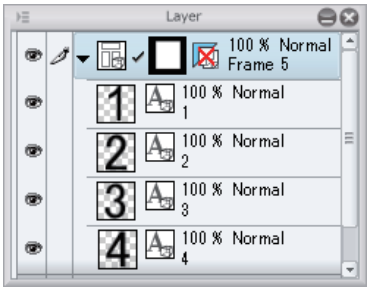


States of frame borders and layers before combined

Combine border

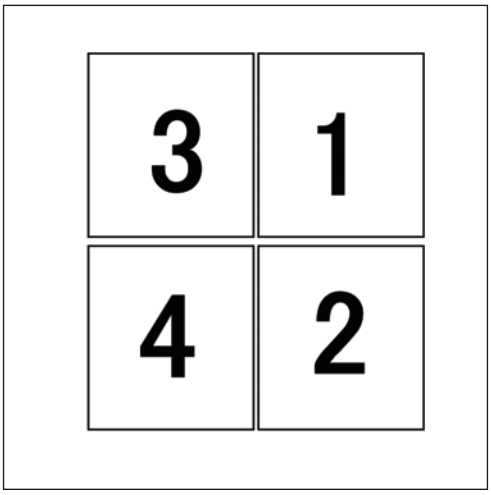
Connects frame borders to combine them in to one frame border. The images in the [Frame folder] before combine are stored in the created [Frame folder].

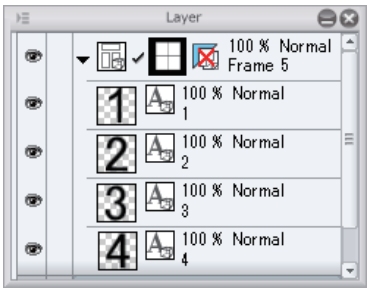




Combine only folder

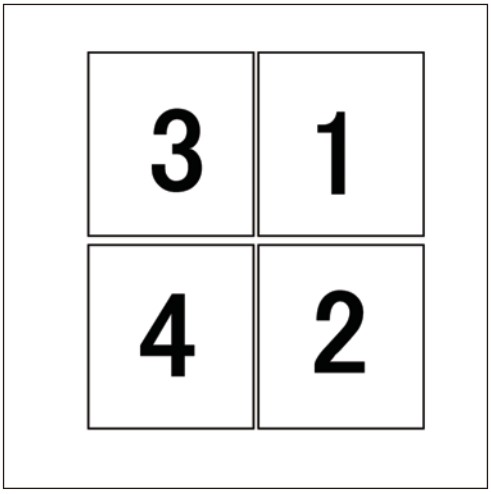
Connects folders into one [Frame folder] with the drawing of frame borders left as they are. The images in [Frame folder] before combine are stored in the created [Frame folder].

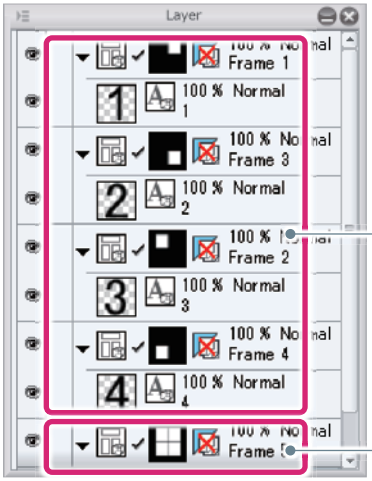




Create common folder

Connects folders into one [Frame folder] with the drawing of frame borders left as they are. The original [Frame folders] are not deleted.





Show in all layers

When a layer including a ruler is selected, the snap range extends to all [Raster layers] and [Vector layers].

Show in same folder

When a layer including a ruler is selected, the snap range extends to [Raster layers] and [Vector layers] within the same layer folder. When there is no layer folder, this becomes the same as [Whole canvas].

Show only when editing target

When a layer including a ruler is selected, the snap range is limited to the layer being configured.

Layer settings

Allows you to configure settings related to layers such as reference layer, clipping, layer lock, transparent pixel lock, and so on.

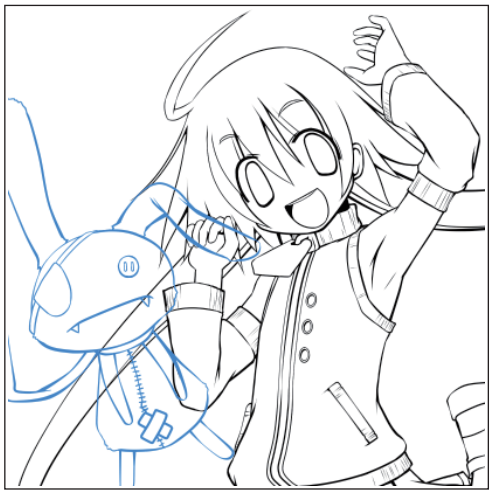
Set as reference layer

Configures a layer as [Reference] layer. With certain tools, you will be able to select and draw on the currently edited layer by referring only to this layer.

The tools that can use the [Reference] layer are as follows.

Tools that can use the [Reference] layer	[Fill] tool [Auto select] tool [Shrink selection] tool [Fill] tool (Enclose and fill) [Fill] tool (Paint unfilled area)

In this example, the black area of the figure below will be configured as [Reference] layer to paint the girl's hair.

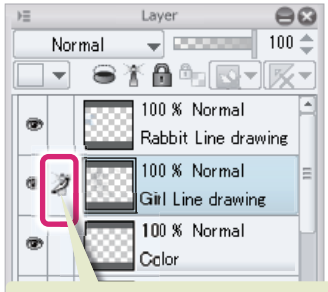


1 Select the layer

On the [Layer] palette, select the layer you want to configure as [Reference] layer. In this example, [Girl_LineDrawing] is selected.

2 Select the command

Select [Layer] menu → [Layer settings] → [Set as reference layer]. The layer icon changes.



The icon changes to when configured as reference layer.

Memo

- Selecting [Layer] menu → [Layer settings] → [Set as reference layer] again cancels the [Reference] layer.
- A [Reference] layer may comprise multiple layers.
- A [Layer Folder] can also be configured as [Reference] layer.

3 Select the layer to draw

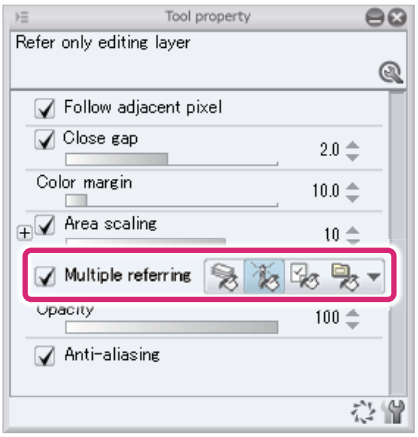
On the [Layer] palette, select a layer to draw.

4 Select the tool

On the [Tool] palette, select a drawing tool. In this example, the [Fill] tool is selected.

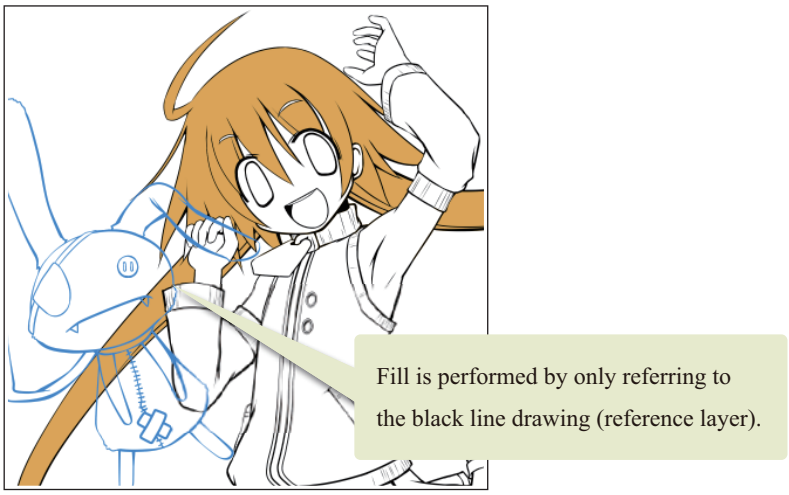
5 Configure the tool property

On the [Tool property] palette, configure the reference as [Reference] layer.



6 Draw by referring to the [Reference] layer

Draw by referring to the [Reference] layer. Clicking the area of the girl's hair allows you to paint by referring to the [Reference] layer.

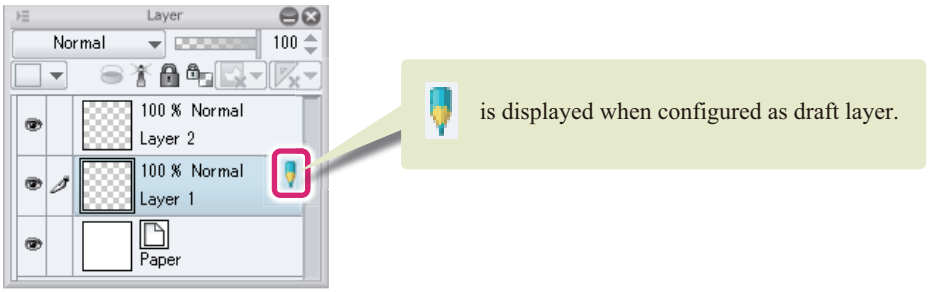


Set as Draft Layer

Configures the layer being edited as [Draft] layer.

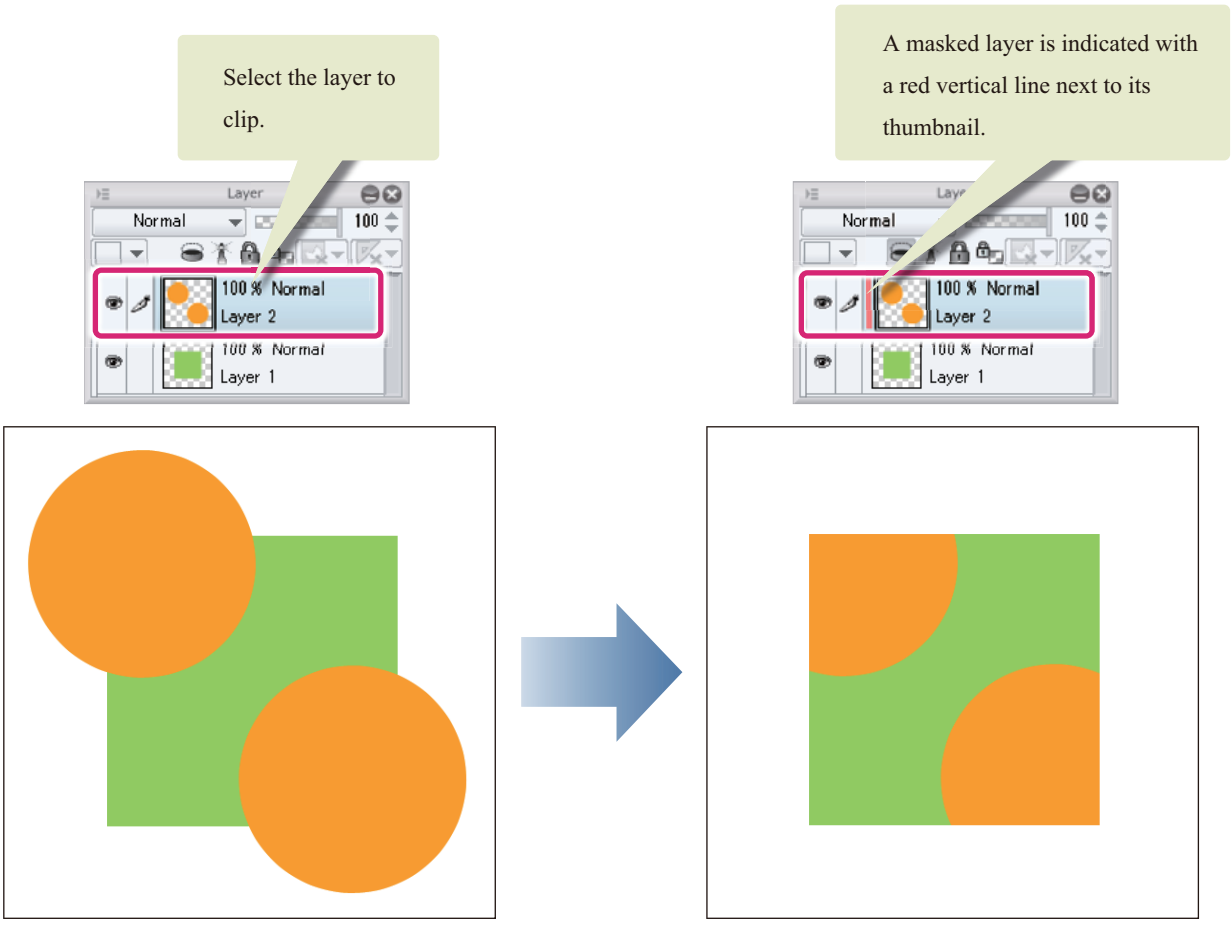
For [Draft layers], the following settings are available when configuring as reference, or exporting files.

- Whether or not to include the [Draft] layer when exporting files with [File] menu → [Export (Single Layer)].
- Whether or not to include the [Draft] layer in the layers to refer to when creating a selection, or performing a fill.



Clip at layer below

Limits the area of the selected layer to display by referring to the layer immediately below.



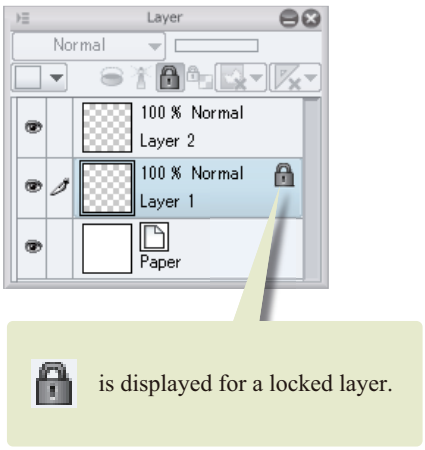
Memo

Performing the following operations on the layer immediately below the clipped layer also clips the created layer.

- **Create a new layer or folder layer.**
- **Insert a material from a [Material] palette.**
- **Paste an image.**
- **Create an image material layer with [File] menu → [Import].**

Lock layer

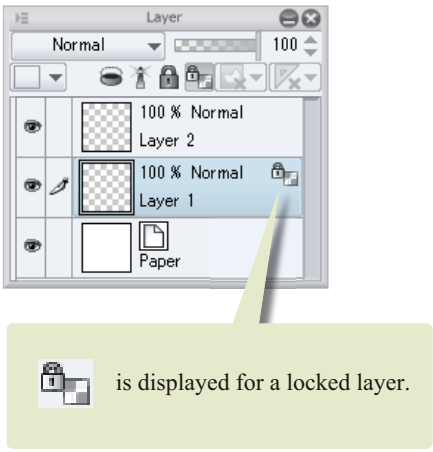
Locks a layer to make layer settings unchangeable.



is displayed for a locked layer.

Lock transparent pixel

Locks drawing to transparent areas of a layer. Allows you to draw on already drawn areas without running over to transparent areas.



is displayed for a locked layer.

Show layer

Displays/hides the selected layer. When an eye icon is displayed on the [Layer] palette, the images on the layer are visible.

Change Layer Name

Displays the [Change Layer Name] dialog box for you to change the name of the selected layer.

1 Select the layer

On the [Layer] palette, select the layer you want to rename.

2 Select the command

Select [Layer] menu → [Layer settings] → [Change Layer Name]. The [Change Layer Name] dialog box displays.

3 Configure the layer name

Configure on the [Change Layer Name] dialog box.

(1) Input the new layer name in [Name].

(2) Click [OK].

4 The layer is renamed

The [Change Layer Name] dialog box closes and the name of the selected layer changes to that configured on the dialog box.

Advanced settings

Opens the dialog box for correction if the correction layer is selected. For [Fill in monochrome] layer, opens the dialog box for selecting a color.

Memo

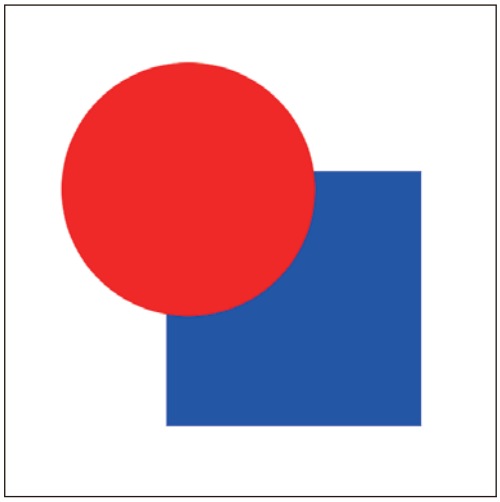
For details on the dialog box for correction, see "New correction layer" .

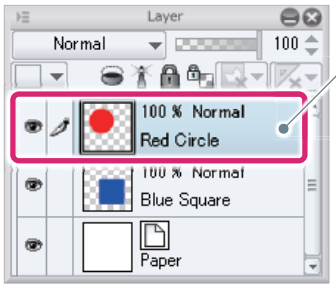
Selection from layer

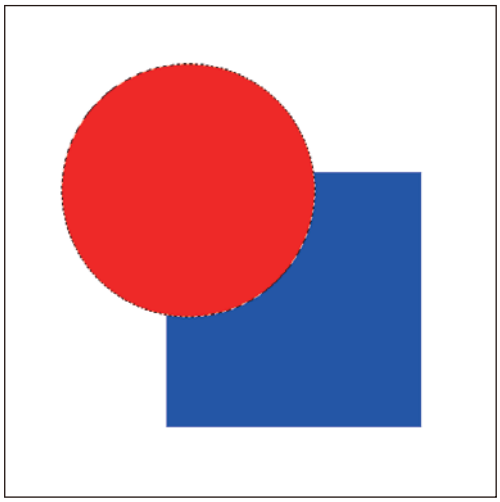
Allows you to create a selection from a drawing on the currently edited layer. You can also add or delete a selection to/from an already selected area. Furthermore, you can create a selection from the area overlapping an already selected area.

Create selection

Creates a selection from a drawing on the currently edited layer.

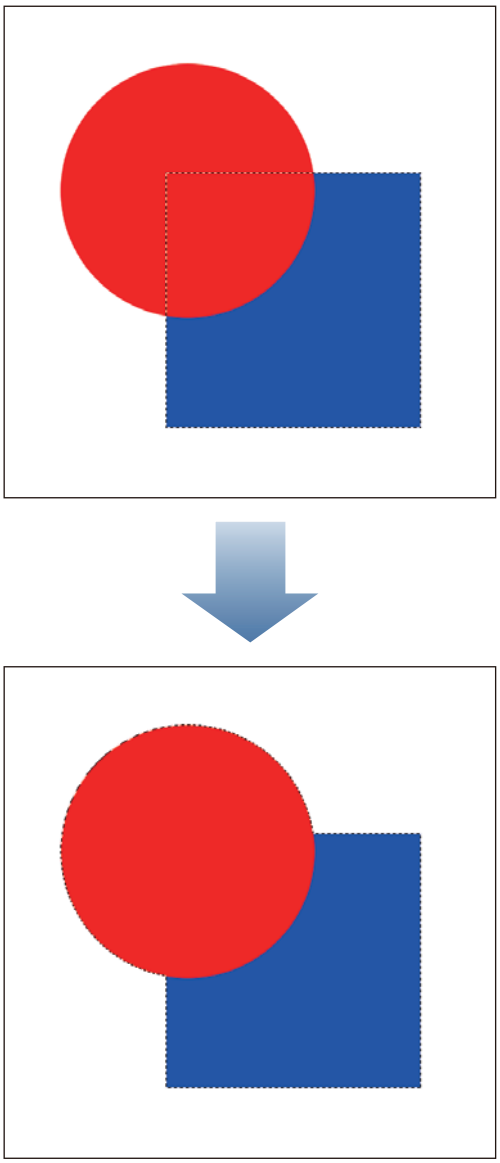






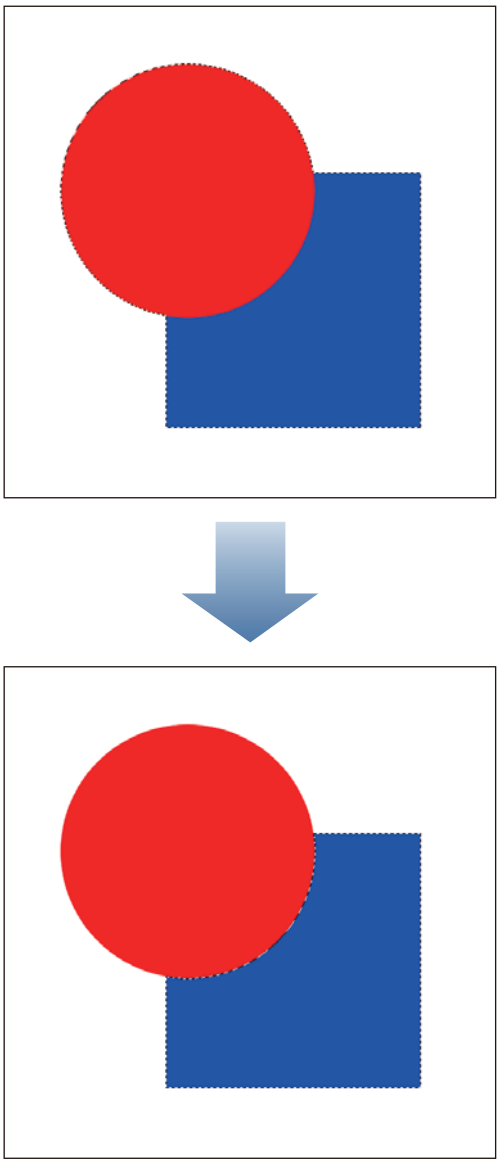
Add selection

Creates a selection from a drawing on the currently edited layer and adds it to an already selected area.



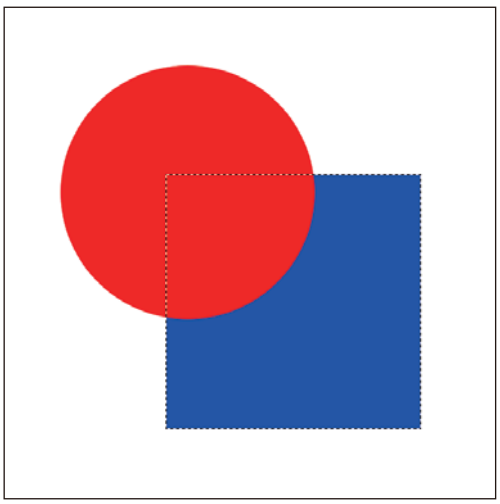
Delete selection

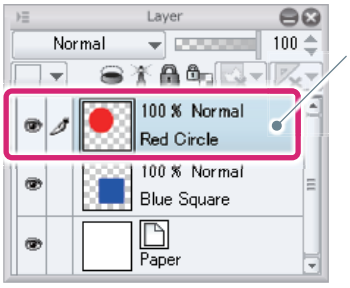
Creates a selection from a drawing on the currently edited layer and removes that portion from an already selected area.

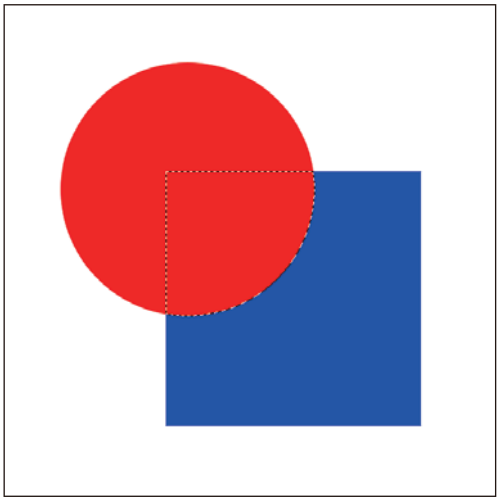


Select overlapping area

Creates a selection from a drawing on the currently edited layer and creates another selection only from the area overlapping with an already selected area.







Rasterize

Converts the content of a layer other than [Raster] layer into [Raster] layer.

Memo

- **For frame border folders, a raster layer with border lines and a folder layer containing masks in the shape of the frames are created.**
- **A [Raster] layer with edge and tone settings configured with the [Layer property] palette can also be rasterized.**

Convert layer

Converts the type of the layer selected on the [Layer] palette. You can change the type and expression color of a layer, as well as convert a drawing inside a selected area into an image material layer.

Original image

After Convert layer (Raster layer: Gray)

1 Select the layer

On the [Layer] palette, select the layer you want to change its type.

2 Select the command

Select [Layer] menu → [Convert layer]. The [Convert layer] dialog box displays. Configure the items on the dialog box.

(1) Configure [Type], [Expression color], [Blending mode] and the like for the layer after conversion.

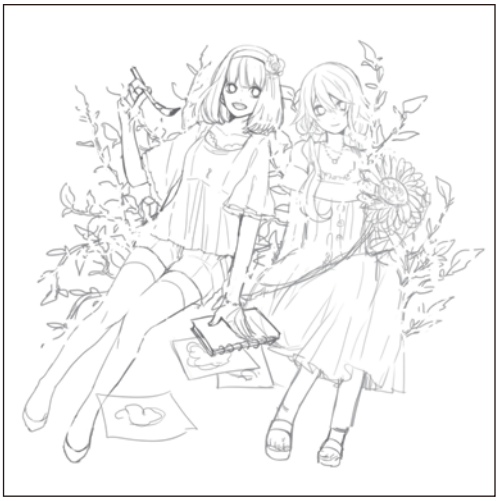
(2) Click [OK].

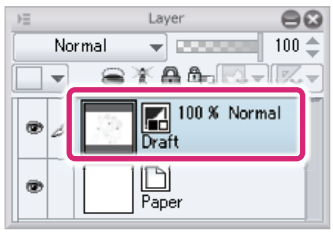
Memo

When converting to [Vector layer], you can configure settings in detail by clicking [Settings for vector]. For details, see "[Vector layer conversion settings] dialog box" .

3 The layer conversion is complete

The dialog box closes, and the layer type converted in accordance with the configured content.





[Convert layer] Dialog Box

(1) Type

Configure the layer type after conversion.

Important **The type of layer that can be configured varies depending on the selected layer.**

Raster layer

Converts the selected layer into a raster layer.

Vector layer

Converts the selected layer into a vector layer.

Important

When converting multiple layers to [Vector layer], they are converted as follows.

- **if a layer includes [Layer mask], the effect does not apply to the conversion.**
- **When you have [Tone] an/ord [Edge] configured for [Effect] on the [Layer property] palette, the [Effect] does not apply to the conversion.**
- **When you have configured the layer color with [Layer property] palette, the color of the vector line after conversion becomes the color you have configured on the layer color.**

Memo **Converting into [Color] a [Gray] or [Monochrome] vector layer drawn with a color brush tip will not display the lines in black or gray, but in the color configured for the brush tip.**

Image material layer

Converts the selected layer into an image material layer.

Memo **If converted after creating a selection, only the drawing inside the selected area is converted into a layer.**

Vector image material layer

Converts the selected layer into an image material layer including a vector image.

A vector image material layer has the following characteristics:

- Is a layer where both raster images and vector images can coexist.
- Vector images included in the layer can be scaled up/down without losing image quality. However, they cannot be re-edited.

A vector image material layer can be configured only when the selected layer includes a vector layer. However, if the vector layer includes [Layer mask], it is converted with [Layer mask] not applied.

Important **Depending on the selected layer, the order in which the layers are stacked may not be the same as before the conversion. For details, see "Vector Image Material Layer Conversion Order" .**

Memo **If converted after creating a selection, only the drawing inside the selected area is converted into a layer.**

Frame border folder

Allows you to change the expression color of the frame border folder when it is selected.

Balloon layer

Allows you to change the expression color of the balloon layer when it is selected.

Text layer

Allows you to change the expression color of the text layer when it is selected.

Stream line layer *

Allows you to change the expression color of the stream line layer when it is selected.

Saturated line layer *

Allows you to change the expression color of the saturated line layer when it is selected.

(2) Name

Configure the layer name after conversion.

(3) Expression color

Allows you to configure the expression color. Select from [Color], [Gray] and [Monochrome].

Important

The expression color [Plain color] configured with Ver.1.2.1 or earlier is converted into the following settings.

- **Expression color: Gray**
- **Drawing color: Only black button ON**

(4) Drawing color

Configures the drawing color for [Gray] and [Monochrome]. Configure the color with the [Black] and [White] buttons.

Memo

[Drawing color] displays when [Expression color] is gray or monochrome.

Gray

The drawing color is configured as follows with the [Black] and [White] buttons.

Only black button ON	The drawing color is configured as a gradation from black to transparent.
Only white button ON	The drawing color is configured as a gradation from white to transparent.
Both black and white buttons ON	The drawing color is configured as a gradation from black to white.

Monochrome

The drawing color is configured as follows with the [Black] and [White] buttons.

Only black button ON	The drawing color is configured as black or transparent.
Only white button ON	The drawing color is configured as white or transparent.
Both black and white buttons ON	The drawing color is configured as black, white or transparent.

Memo

For details on expression color and drawing color, see "Explanation: Expression Color and Drawing Color" .

(5) Blending mode

Configure how to combine with other layers.

(6) Keep original layer

When turned on, allows you to keep the original layer after convert layer.

(7) Settings for vector

When [Vector layer] is configured for [Type], clicking this item opens the [Vector layer conversion settings] dialog box. On the dialog box, you can configure settings when converting to a vector layer in detail. For details on the [Vector layer conversion settings]dialog box, see "[Vector layer conversion settings] dialog box"

[Vector layer conversion settings] dialog box

(1) Maximum line width

Configures the maximum line width of a converted vector line.

A line of the original image thicker than the specified value is recognized as fill in monochrome, and only a surrounding vector line is created.

Memo

The unit of [Maximum line width] can be changed on the [Preferences] dialog box. For details, see "File Menu" → "Preferences [Windows]" → "Ruler/Frame/Unit" .

(2) Correction

Configures the number of control points after the conversion.

The larger the value, the less the number of the control points after the conversion, resulting in a simplified vector line.

(3) Output all in black

The converted vector line is drawn in black when turned on.

Creates a vector line per RGB value of the original image when turned off.

Important

When [Output all in black] is turned off, while the number of colors of the original image exceeds 16, it cannot be converted to vector layer.

(4) Include white in conversion

A pixel of all RGB values set to 255 is not converted into a vector line when turned off.

(5) Anti-aliasing

Allows you to configure the strength of anti-aliasing of a converted vector line. You can select from [None], [Weak], [Middle] and [Strong].

(6) Density threshold

Configures the border value of opacity for pixels to be converted into a vector line.

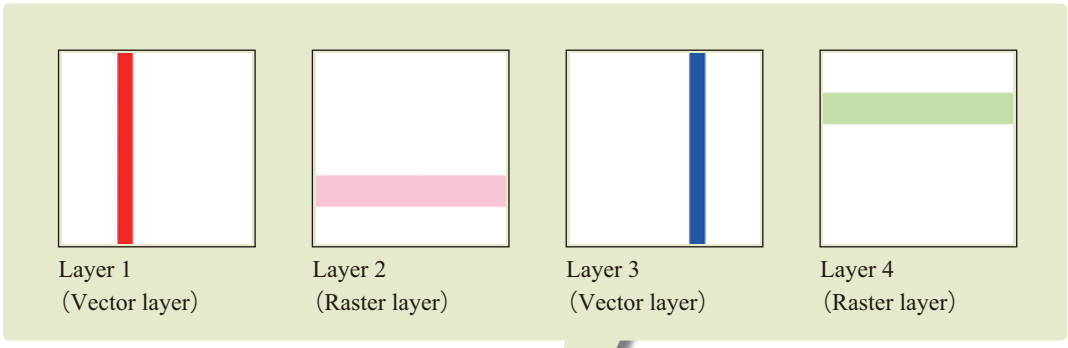
Pixels with the opacity larger than the configured value will be converted into a vector line.

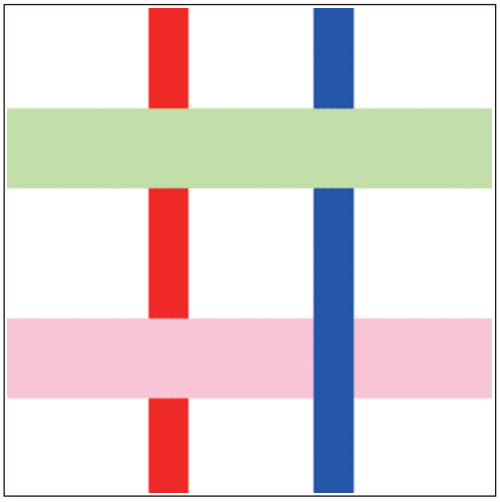
Important

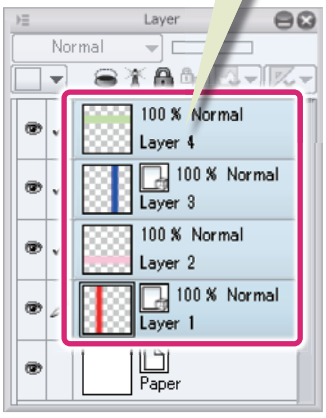
If [Output all in black] is turned on, while [Include white in conversion] is turned off, pixels larger than the value of [Density threshold] in both opacity and brightness are converted to vector line.

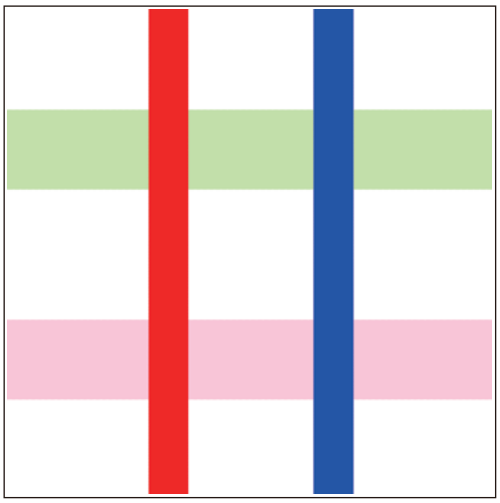
Vector Image Material Layer Conversion Order

When converting into a vector image material layer, all layers other than vector layers are grouped into one first, and then, the vector layers stacked above. For this reason, when raster layers are stacked above vector layers as shown in the figure below, the order in which layers are stacked becomes different after convert layer.



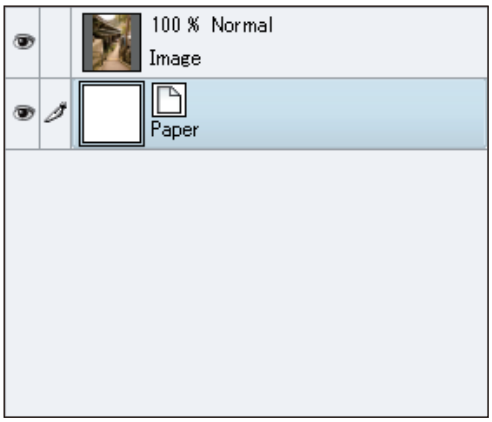




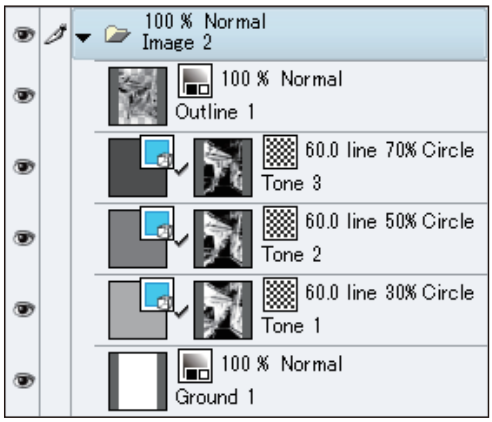


LT conversion of layer [EX] *

Allows you to separate a selected layer into outlines (line drawings) and tones and convert each of them into different layers.



Original image



After LT conversion of layer

[LT conversion of layer] can be used on the following layers.

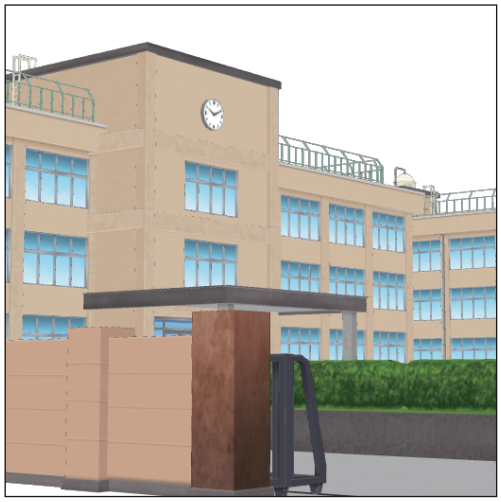
Applicable layer types	Raster layer Vector layer Balloon layer Text layer Image material layer 3D layer Saturated line layer Stream line layer

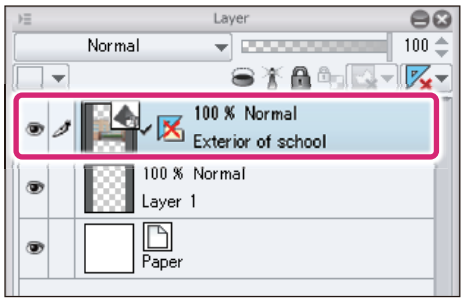
Memo

You can also perform LT conversion of layer by selecting [Layer property] palette → [Extract line] → [Execution of LT conversion of layer]. For details on how to execute from the [Layer property] palette, see "Functions of Layer property Palette" → "Functions of Layer property Palette (Standard)" → "Extract line [EX]" .

1 Select the layer

Select the layer you want to separate into outlines and tones and convert.





Memo

- When selecting a 3D layer, be sure to configure the 3D material layout, camera angle and the like before converting. For how to configure, see "Explanation: 3D Materials" .
- When converting a 3D material for Manga Studio 4.0, such as an LWO-format material without texture, be sure to turn on [Light Source] on the [Tool property] palette.

2 Select the command

Select [Layer] menu → [LT conversion of layer].

3 Configure the conversion method

On the [LT conversion of layer] dialog box, configure the outline and tone settings for the conversion.

(1) Configure the method for extracting the outlines, layer to output the outlines, depth of the outlines, and so on.

(2) Select the method for extracting the texture line drawing.

(3) Configure posterization and type of tone.

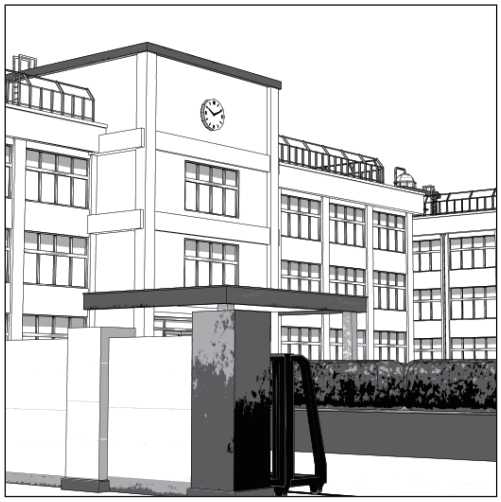
(4) Click [OK].

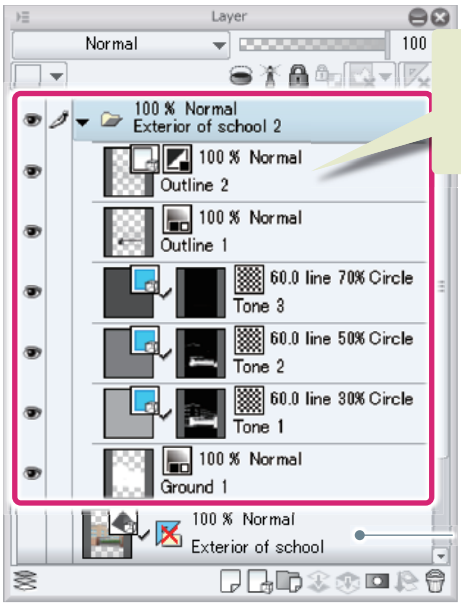
Memo

- Turning on [Preview] will allow you to preview the settings on the canvas window. However, [Type], [Number of lines] and [Angle] of the tone will not be reflected in the preview.
- Turning on [Preview] may slow your computer. To stop the preview, long press the [Esc] key.
- The [LT conversion of layer] settings to be configured differs depending on whether the layer to be converted is 3D or not.
- For details, respectively see "[LT conversion of layer] Dialog Box (3D Layer)" and "[LT conversion of layer] Dialog Box (Except 3D Layer)" .

4 The LT conversion of layer is complete

The LT conversion of layer is complete, and a layer folder created. The outline and tone layers separated from the original layer are stored inside the layer folder. The original layer is kept but hidden.





The layer is separated into outlines and tones before the conversion

Layer before conversion

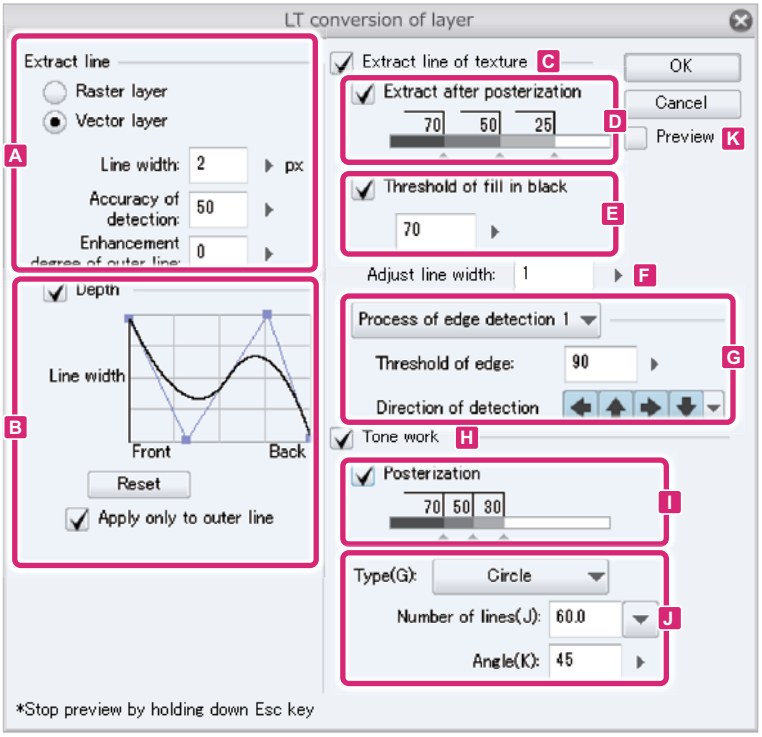
Memo

- **The conversion will create as many tone layers as the number of gradations you configured for [Posterization] on the [LT conversion of layer] dialog box.**
- **When conversion is from a 3D layer, two types of outline layers will be created: one extracted from the 3D material shape, and another from the texture.**

[LT conversion of layer] Dialog Box (3D Layer)

When the selected layer is a 3D layer, configure the following items.

Memo **When the selected layer is other than a 3D layer, see "[LT conversion of layer] Dialog Box (Except 3D Layer)" .**



A. Extract line

Configure how to extract the outlines from the 3D layer.

(1) Output layer

Select the type of layer to output as outline. You can select from [Raster layer] and [Vector layer].

(2) Line width

Allows you to configure the line width of the outlines.

(3) Accuracy of detection

Allows you to configure the accuracy with which to detect the outlines.

(4) Enhancement degree of outer line

Allows you to configure the degree by which the outer lines will be enhanced.

B. Depth

Turning on this item allows you to give depth to the outlines. You cannot configure [Depth] when [Process of edge detection 2] is configured for [Process of edge detection].

(1) Line width

Adjust by operating the graph. The larger the difference between the upper limit and lower limit of [Front] and [Back], the larger will be the line depth.

Memo

Editing the control points on the graph will allow you to configure the line width in more detail:

- **Dragging a control point changes its position.**
- **Clicking on the graph adds a control point.**
- **Dragging a control point out of the graph deletes that control point.**

(2) Reset

Initializes the [Depth] settings.

(3) Apply only to outer line

When turned on, the [Depth] settings apply only to the outermost lines.

C. Extract line of texture

When turned on, the texture of the 3D layer is also a target of the conversion.

Memo

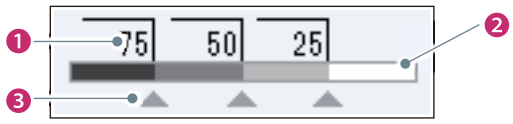
If [Extract line] on the [Layer property] palette is turned on, you can inherit the settings for [Extract line] to the items under [Extract line of texture], [Extract after posterization], [Threshold of fill in black], [Adjust line width], and [Method of detecting edge].

D. Extract after posterization

When turned on, the texture is posterized before the outline is extracted. The gradation can be adjusted using [Posterization control].

Posterization control

Adjust the grayscacle gradation to extract as outline.



(1) Density

Shows the grayscale value. Clicking the numeric value allows you to directly change it.

(2) Preview

Previews the posterization.

(3) Node

A controller to adjust the grayscale gradation. Dragging the node horizontally allows you to adjust the gradation range reflecting the density. Dragging a node out of the [Posterization control] allows you to remove it. Clicking where there is none allows you to add a node.

E. Threshold of fill in black

Allows you to configure the area to be filled in black. You can configure the threshold using a slider.

F. Adjust line width

Allows you to adjust the width of the texture outline using a slider.

G. Process of edge detection

Allows you to select the method for extracting the texture. The items to configure vary depending on the selected method.

Process of edge detection 1	The outline is extracted based on [Threshold of edge] and [Direction of detection].
Process of edge detection 2	The outline is extracted based on [Threshold of edge height] and [Threshold of gradient variation]. This method is suitable when a more delicate expression is required.

(1) Threshold of edge

Configure the grayscacle threshold to extract as outline. The smaller the value, the more lines will be detected as the area regarded as line drawing becomes wider.

(2) Direction of detection

Specify the direction in which to detect the outline. Detection of outline in the turned off direction is poorer.

(3) Threshold of edge height

Allows you to adjust the height of the edge to detect as outline. The smaller the value, the less strict will be the edge, which will make even small changes to be detected as edge.

(4) Threshold of gradient variation

Adjusts the continuity of the detected line drawing based on the variation in the thickness of the outline. The larger the value, the more likely to make segments short.

H. Tone work

When turned on, allows you to configure the tones.

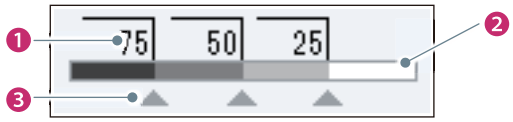
Memo **If [Tone] on the [Layer property] palette is turned on, you can inherit the settings for [Tone].**

I. Posterization

When turned on, allows you to adjust the density of the tones using [Posterization control].

Posterization control

Adjusts the density of the tones.



(1) Density

Shows the density of the tones. Clicking the numeric values allows you to directly change them.

(2) Preview

Previews the posterization.

(3) Node

A controller to adjust the gradation of the tone density.

- Dragging the node horizontally allows you to adjust the gradation range reflecting the density of the tones.
- Dragging a node out of the [Posterization control] allows you to remove it.
- Clicking where there is none allows you to add one.

J. Type

Allows you to select a tone type and configure the selected tone. The items to configure vary depending on the selected tone type.

Memo

The items configured by [Type] cannot be previewed on the canvas.

(1) Type

Select the shape of the tones.

(2) Number of lines

Configure the number of tone (halftone dot) lines.

(3) Angle

Configure the angle of the tones.

(4) Size

Configure the noise size. You can configure this item when noise is selected for [Type].

(5) Factor

Configure the noise factor. You can configure this item when noise is selected for [Type].

K. Preview

Turning on this item allows you to preview the [LT conversion of layer] on the canvas as you configure.

Memo

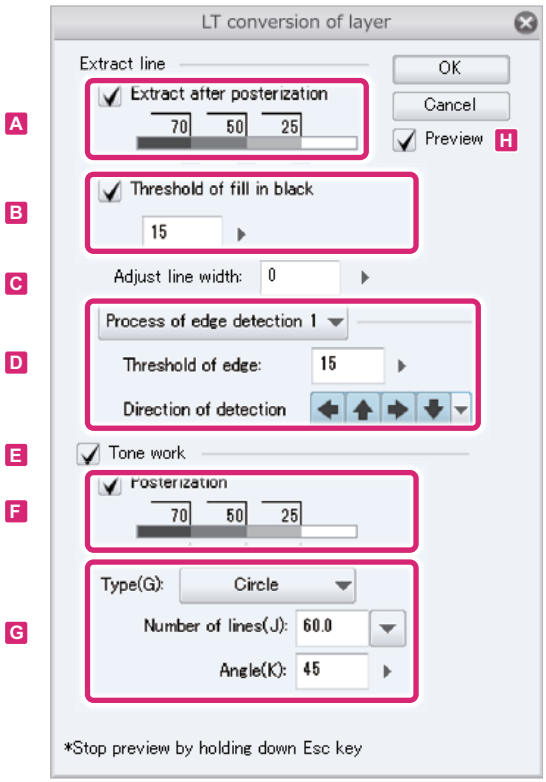
- **The items configured by [Type] cannot be previewed on the canvas.**
- **Turning on [Preview] may slow your computer. To stop preview, long press the [Esc] key.**

[LT conversion of layer] Dialog Box (Except 3D Layer)

When the selected layer is other than a 3D layer, configure the following items.

Memo

- **When the selected layer is a 3D layer, see "[LT conversion of layer] Dialog Box (3D Layer)" .**
- **If [Extract line] on the [Layer property] palette is turned on, you can inherit the [Extract line] settings to each of the following items: [Extract after posterization], [Threshold of fill in black], [Adjust line width], and [Method of detecting edge].**

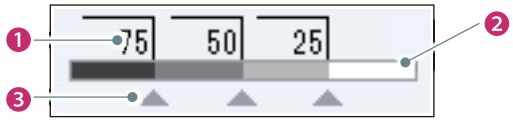


A. Extract after posterization

When turned on, the original layer is posterized before outline extraction. The gradation can be adjusted using [Posterization control].

Posterization control

Adjusts the grayscale gradation to extract as outline.



(1) Density

Shows the grayscale value. Clicking the numeric value allows you to directly change it.

(2) Preview

Previews the posterization.

(3) Node

A controller to adjust the grayscale gradation.

- Dragging the node horizontally allows you to adjust the gradation range reflecting the density.
- Dragging a node out of the [Posterization control] allows you to remove it.
- Clicking where there is none allows you to add one.

B. Threshold of fill in black

Allows you to configure the area to be filled in black. You can configure the threshold using a slider.

C. Adjust line width

Allows you to adjust the width of the outline using a slider.

D. Method of detecting edge

Allows you to select the method for extracting the outline. The items to configure vary depending on the selected method.

Process of edge detection 1	The outline is extracted based on [Threshold of edge] and [Direction of detection].
Process of edge detection 2	The outline is extracted based on [Threshold of edge height] and [Threshold of gradient variation]. This method is suitable when a more delicate expression is required.

(1) Threshold of edge

Configure the grayscacle threshold to extract as outline. The smaller the value, the more lines will be detected as the area regarded as outline becomes wider.

(2) Direction of detection

Specify the direction in which to detect the outline. Detection in the turned off direction is poorer.

(3) Threshold of edge height

Allows you to adjust the height of the edge to detect as outline. The smaller the value, the less strict will be the edge, which will make even small changes to be detected as line.

(4) Threshold of gradient variation

Adjusts the continuity of the detected outline based on the variation in its thickness. The larger the value, the more likely to make segments short.

E. Tone work

When turned on, allows you to configure the tone.

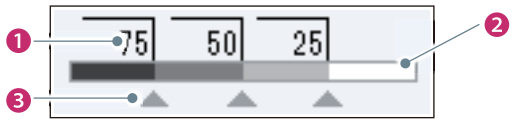
Memo **If [Tone] on the [Layer property] palette is turned on, you can inherit the [Tone] settings.**

F. Posterization

When turned on, allows you to adjust the density of the tone using [Posterization control].

Posterization control

Adjusts the density of the tones.



(1) Density

Shows the density of the tones. Clicking the numeric values allows you to directly change them.

(2) Preview

Previews the posterization.

(3) Node

A controller to adjust the gradation of the tone density.

- Dragging the node horizontally allows you to adjust the gradation range reflecting the density of the tones.
- Dragging a node out of the [Posterization control] allows you to remove it.
- Clicking where there is none allows you to add one.

G. Type

Allows you to select a tone type and configure the selected tone. The items to configure vary depending on the selected tone type.

Memo

The items configured by [Type] cannot be previewed on the canvas.

(1) Type

Select the shape of the tone.

(2) Number of lines

Configure the number of tone (halftone dot) lines.

(3) Angle

Configure the angle of the tone.

(4) Size

Configure the noise size. You can configure this item when noise is selected for [Type].

(5) Factor

Configure the noise factor. You can configure this item when noise is selected for [Type].

H. Preview

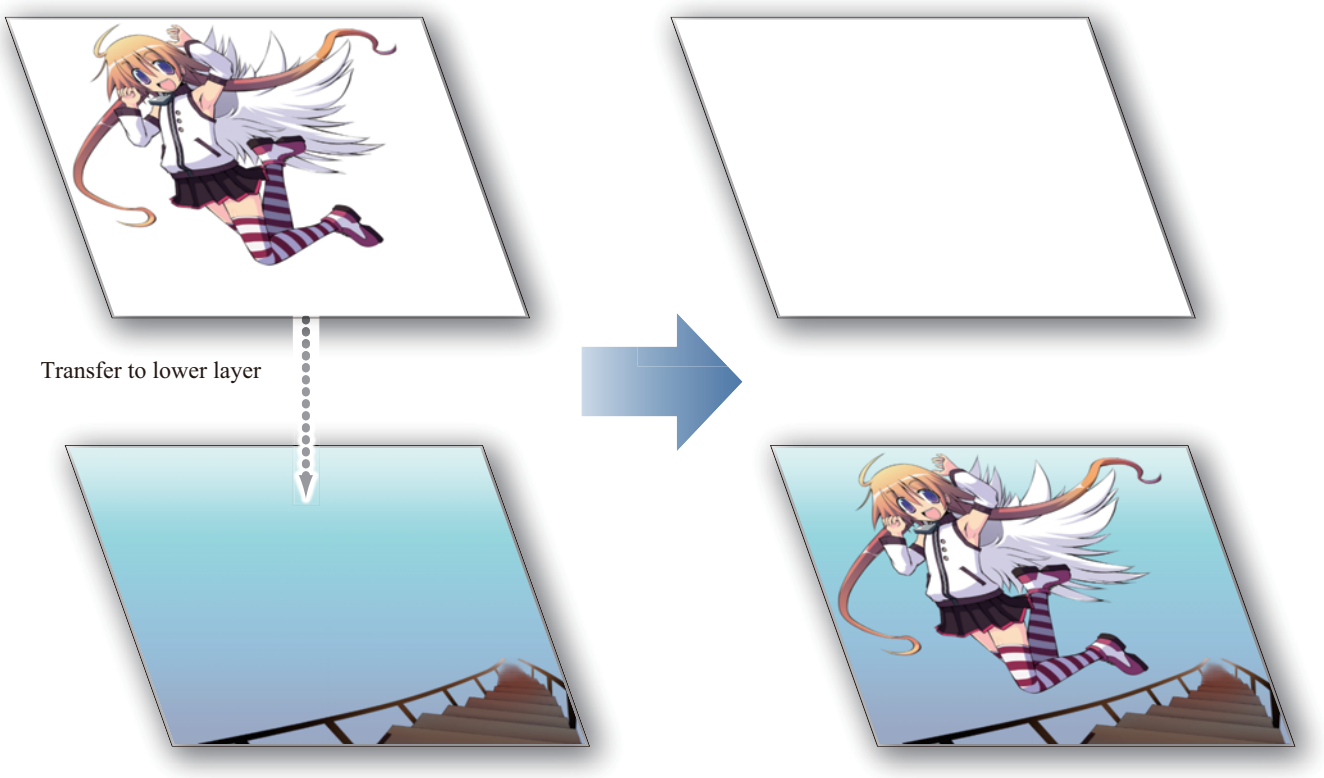
Turning on this item allows you to preview the [LT conversion of layer] on the canvas as you configure.

Memo

- **The items configured by [Type] cannot be previewed on the canvas.**
- **Turning on [Preview] may slow your computer. To stop the preview, long press the [Esc] key.**

Transfer to Lower Layer

Transfers the image on a selected layer to the layer immediately below.



Memo **Transferring images is also possible from a vector layer to a raster layer. In this case, the image is transferred rasterized.**

1 Select the layer

On the [Layer] palette, select the layer you want to transfer.

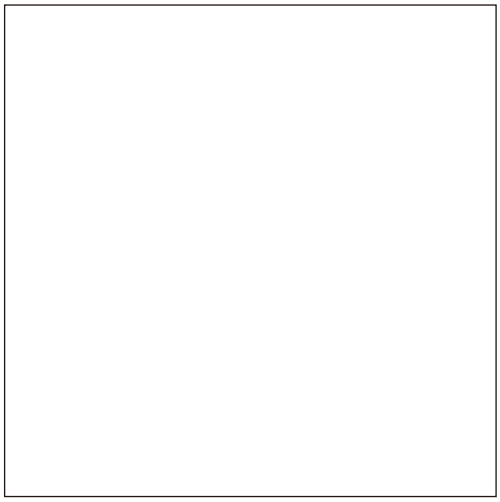
2 Select the command

Select [Layer] menu → [Transfer to Lower Layer].

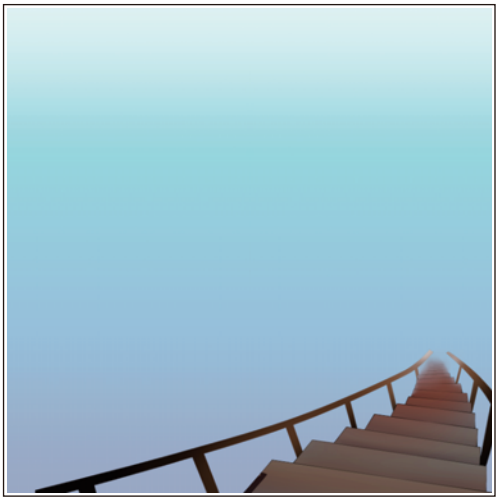
3 Transfer to lower layer is complete

The image is transferred from the selected layer to the layer immediately below.

[Girl]



[Girl]



[Background]

[Background]

Combine to Layer below

Combines a selected layer with that immediately below to make one.

Memo

- **After combine, [Vector] layers are converted into [Raster] layers. When both are [Vector] layers, the result of the combine is also a [Vector] layer.**
- **When only a [Text] layer and a [Balloon] layer are combined, the resulting layer is not converted into a [Raster] layer. This also applies when only [Text] layers or [Balloon] layers are combined.**
- **When a layer including a ruler is combined, the ruler is applied to the layer after combine.**
- **When only a layer folder is selected, layers within the layer folder are combined and converted into one layer.**

1 Select the layer

On the [Layer] palette, select the layer you want to combine.

2 Select the command

Select [Layer] menu → [Combine to Layer below].

Memo

When the lower layer has [layer mask], the confirmation message: [Do you want to apply mask before combining?] displays.

- **Selecting [Apply] combines the layers after applying the mask to the lower layer.**
- **Selecting [Maintain] keeps the [Layer mask] to apply it to the combined layer.**

3 Combine to layer below is complete

The selected layer and that immediately below are now combined.

Combine Selected Layer

Combines selected layers to make one. This is used to join images drawn separately, for example.

Memo

- **After combine, [Vector] layers are converted into [Raster] layers. When both are [Vector] layers, the result of the combine is also a [Vector] layer.**
- **When only a [Text] layer and a [Balloon] layer are combined, the resulting layer is not converted into a [Raster] layer. This also applies when only [Text] layers or [Balloon] layers are combined.**
- **When a layer including a ruler is combined, the ruler is applied to the layer after combine.**

1 Select the layer

On the [Layer] palette, select the layer you want to combine.

Important

The layers to select must be consecutive layers.

2 Select the command

Select [Layer] menu → [Combine Selected Layer].

3 Combine selected layer is complete

The selected layers are combined into one.

Combine Showing Layer

Combines only layers on the [Layer] palette that are visible. Hidden layers are not combined and are left as they are.

Memo

- **After combine, [Vector] layers are converted into [Raster] layers. When both are [Vector] layers, the result of the combine is also a [Vector] layer.**
- **When a layer including a ruler is combined, the ruler is applied to the layer after combine.**

Combine copies of displayed layer *

Combines the copies of visible layers. The original layers are kept as they are.

Memo

- **Also locked layers can be combined.**
- **After combine, the layer is converted into [Raster] layer.**

Merge Layers

Combines all layers into one.

Memo

- **Also locked layers can be integrated.**
- **After combine, the layer is converted into [Raster] layer.**
- **When a layer including a ruler is combined, the ruler is applied to the layer after combine.**

1 Select the command

Select [Layer] menu → [Merge layers].

2 Combine of layers is complete

All layers are integrated into one.

Layer Order

Changes the order in which a selected layer is stacked.

Top

Moves the selected layer to the top.

Up

Moves up the selected layer by one place.

Down

Moves down the selected layer by one place.

Bottom

Moves the selected layer to the bottom.

Change Selected Layer

Changes the layer to edit.

Layer Above

Changes the layer to edit to that one above.

Layer Below

Changes the layer to edit to that one below.

Selection Menu

The [Selection] menu contains items for operating selected items and areas.

Select All

Selects the entire canvas to create a selection area.

Select [Selection] menu → [Select All] to execute.

Clear selection

Deselects a selected area.

Select [Selection] menu → [Clear selection] to execute.

Reselect

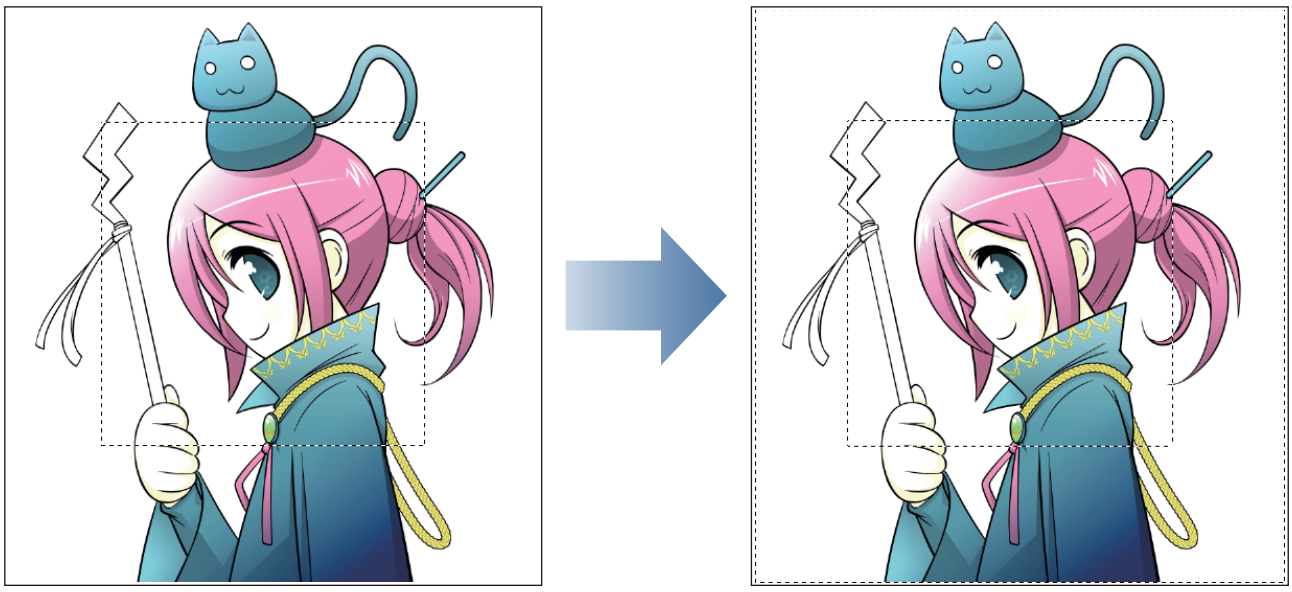
Selects a previously deselected selected area.

Select [Selection] menu → [Reselect] to execute.

Invert selected area

Inverts the selected area.

Select [Selection] menu → [Invert selected area] to execute.

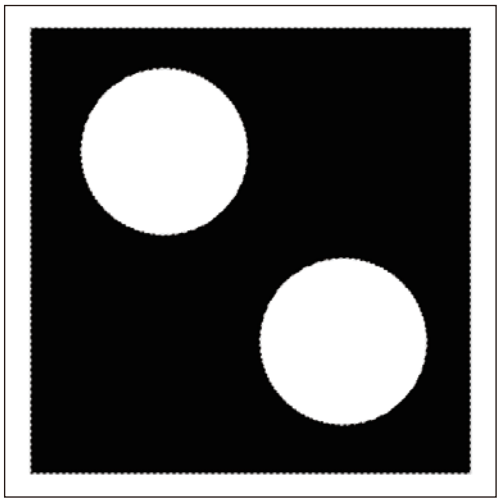


Expand Selected area

Use to expand the selected area by the specified width.

1 Create a selection

Using a [Marquee] tool, create a selection.



2 Specify the expansion width

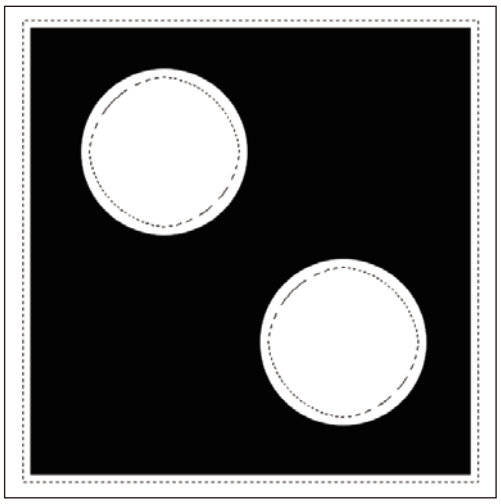
Select [Selection] menu → [Expand Selected area]. The [Expand Selected area] dialog box displays.

(1) Specify [Expansion width] and select an [Expansion type].

(2) Click [OK].

3 The selected area expands

The selected area expands by the specified width.



[Expand Selected area] Dialog Box

(1) Expansion width

Specify the width by which to expand the selected area.

Memo

The unit for [Expansion width] can be changed on the [Preferences] dialog box. For details, see "File Menu" → "Preferences [Windows]" → "Ruler/Frame/Unit" .

(2) Expansion type

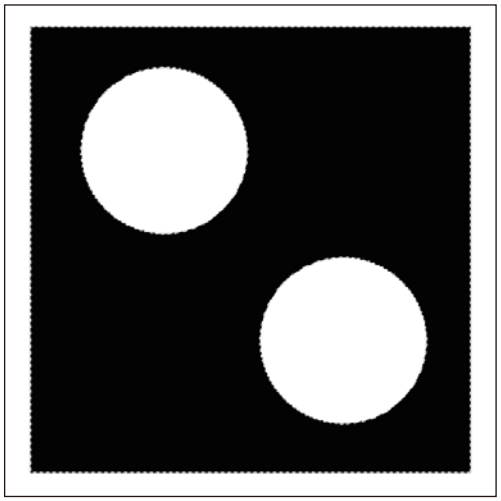
Select how to process the corners when expanding from each type.

Shrink Selected area

Use to reduce the selected area by the specified width.

1 Create a selection

Using a [Marquee] tool, create a selection.



2 Specify the reduction width

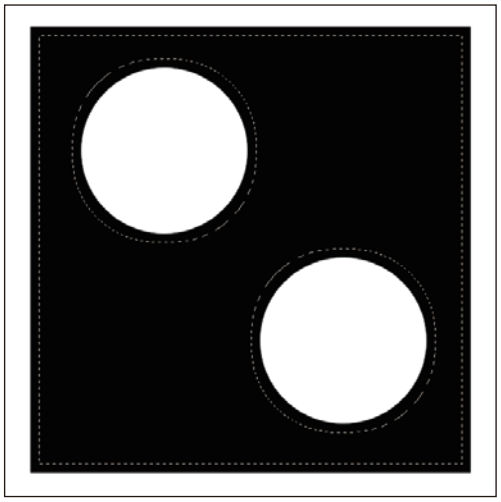
Select [Selection] menu → [Shrink Selected Area]. The [Shrink Selected area] dialog box displays.

(1) Specify [Shrinking width] and select an [Shrinking type].

(2) Click [OK].

3 The selected area reduces

The selected area reduces by the specified width.



[Shrink Selected area] Dialog Box

(1) Shrinking width

Specify the width by which to reduce the selected area.

Memo

The unit for [Shrinking width] can be changed on the [Preferences] dialog box. For details, see "File Menu" → "Preferences [Windows]" → "Ruler/Frame/Unit" .

(2) Shrinking type

Select how to process the corners when reducing from each type.

(3) Shrink at edge of canvas

Turning on this check box allows you to reduce the selected area even when it is on the canvas edge.

Blur Border

Use to blur the border of a selection.

1 Create a selection

Using a Marquee tool, create a selection. In this example, select the hair.

2 Select the command

Select [Selection] menu → [Blur Border]. The [Blur border] dialog box displays.

(1) Specify [Area].

(2) Click [OK].

Memo

The unit for [Area] can be changed on the [Preferences] dialog box. For details, see "File Menu" → "Preferences [Windows]" → "Ruler/Frame/Unit" .

3 Blur border is configured

Blur border is configured for the selected area.

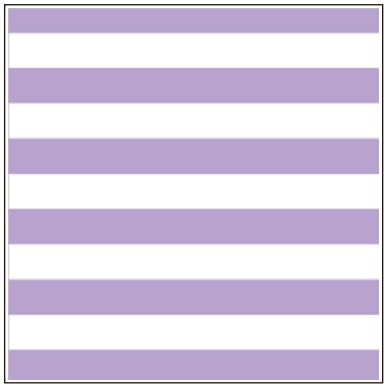
4 Fill selected area (Example of use)

Filling the selected area blurs the border of the selected area.

Select Color Gamut

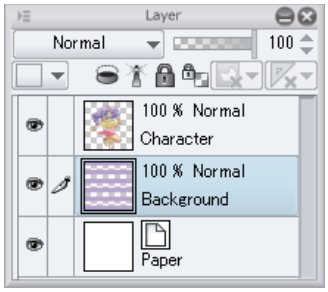
Creates a selection by specifying a color.

The following describes the procedure to select only the areas of [Character] in violet from an image composed of the layers indicated below, as an example.



[Background]

[Character]



1 Select the image layer

On the [Layer] palette, select the target image layer. In this example, select [Character].

2 Select the command

Select [Selection] menu → [Select Color Gamut]. The [Select color gamut] dialog box displays.

(1) Turn on [Multiple referring] and configure the layer(s) to refer to create the selection. In this example, configure [All layers].

(2) Click the canvas to specify the color.

(3) Adjust [Color margin] to adjust the selected area.

(4) Click [OK].

3 The creation of selection is complete

A selection is created in the area of the specified color. In this example, areas in violet are selected from all layers.

[Select color gamut] Dialog Box

(1) Color margin

Configure the color margin for the target color. The larger the value, the larger will be the tolerance to include areas in other colors than the target.

(2) Selection type

You can configure how to create a selection when there is already one.

A. Select new	Creates a new selection.
B. Select additionally	Adds a selection to an already selected area.
C. Delete from selection	Erases a selection from an already selected area.

(3) Multiple Referring

Configures the layer(s) to refer to.

All layers	Refers to all layers. However, hidden layers cannot be referred to.
Reference layer	Refers to layers configured as reference layer.
Selected layer	Refers to layers that are selected on the [Layer] palette.
Layer in folder	Refers to layers within the layer folder. The layer to refer to must be in the same folder as the currently edited layer.

Memo

When [Multiple referring] is turned off, the currently edited layer is referred to.

(4) Reset

Resets the specified selection.

Select Overlapping Vectors

Selects the entire vector line even if only a small portion of the vector line center overlaps a selected area.

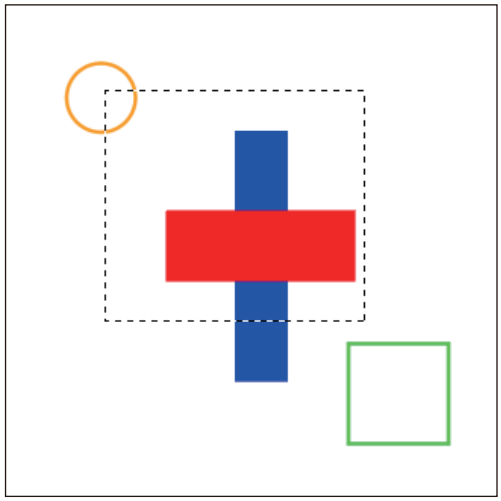
Memo **If a vector line is selected, the sub tool changes to [Object].**

1 Select the layer

On the [Layer] palette, select the [Vector] layer.

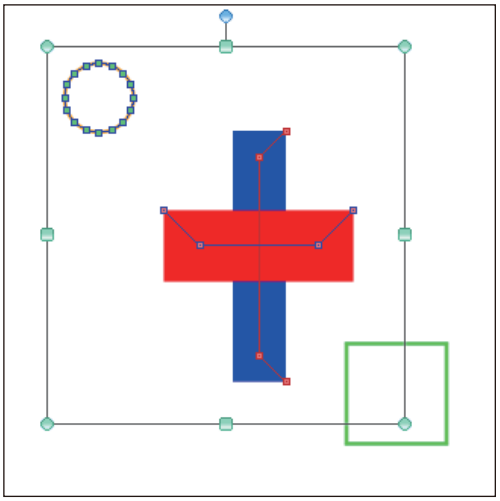
2 Create a selection

Using a Marquee tool, create a selection.



3 Select vector line is complete

Select [Selection] → [Select Overlapping Vectors]. A vector line whose center overlaps the selected area is selected.



Select Vectors Within Area

Selects a vector line completely included in a selected area.

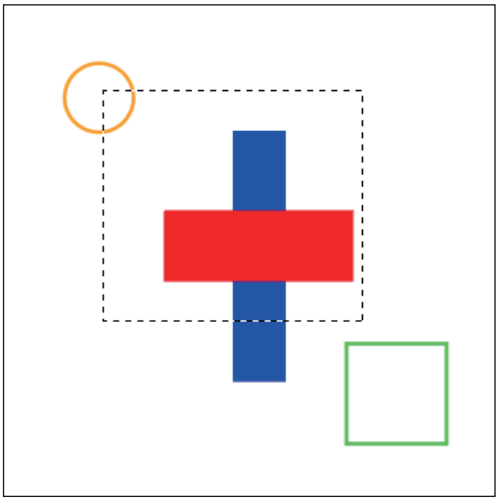
Memo **If a vector line is selected, the sub tool changes to [Object].**

1 Select the layer

On the [Layer] palette, select the [Vector] layer.

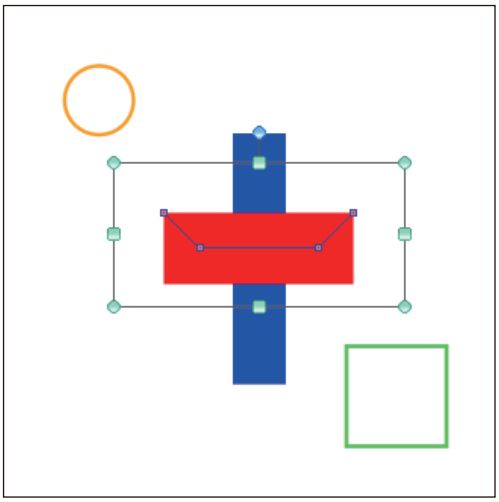
2 Create a selection

Using a Marquee tool, create a selection.



3 Select vector line is complete

Select [Selection] → [Select Vectors Within Area]. A vector line completely included in the selected area is selected.



Quick Mask

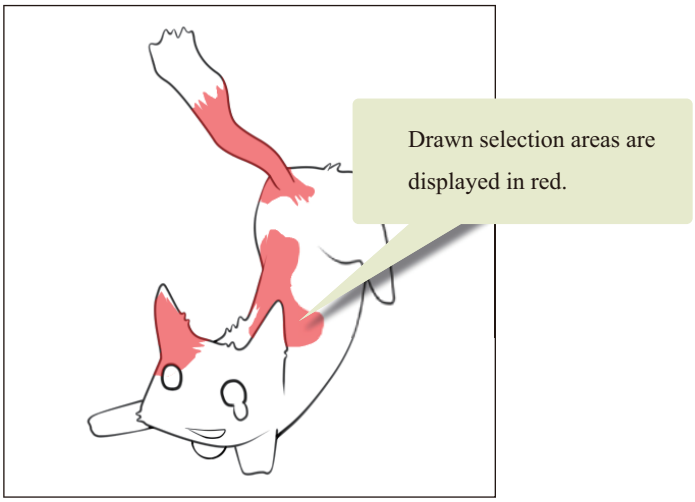
Allows you to create a [Quick mask] layer as a temporary [Selection] layer for creating a selection using a drawing tool. This allows you to easily create selections with complex shapes by checking the images.

1 Select the command

Select [Selection] menu → [Quick Mask] to turn on the menu item. A [Quick mask] is created in the [Layer] palette.

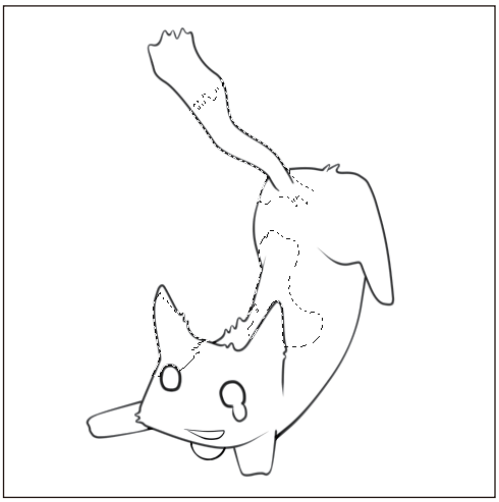
2 Draw the selection

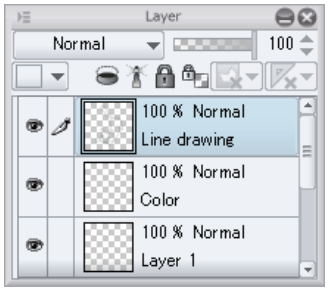
With a drawing tool, draw the selection on the quick mask. The area where you drew the selection is displayed in red.



3 Convert the quick mask into selection

Select [Selection] menu → [Quick Mask] again to turn off the menu item. A selection is created from the area drawn on the [Quick mask]. The quick mask is deleted.





Convert Selection Layer

Allows you to create a [Selection] layer to save the selected area as an image. Drawing on the [Selection] layer allows you to edit the saved selection area.

1 Create a selection

Using a Marquee tool, create a selection. In this example, the hair is selected.

2 Select the command

Select [Selection] menu → [Convert Selection Layer].

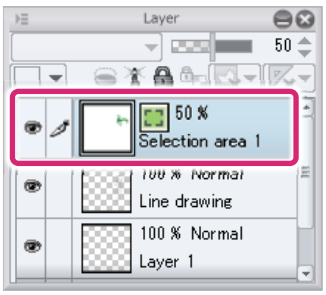
3 The Selection layer is created

The selected area is converted into [Selection] layer.

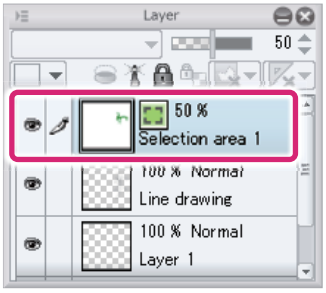
The area in green on the canvas corresponds to the [Selection area] layer. The [Selection area] layer is created in the [Layer] palette.

Memo

- **For how to convert a saved [Selection area] layer into a selection, see "Convert Selection Layer to Selection" .**
- **The [Selection] layer can be displayed/hidden using the [Show/Hide layer] icon on the [Layer] palette.**



Drawing on the created [Selection area] layer allows you to edit the selected area.



Convert Selection Layer to Selection

Creates a selection from the [Selection] layer.

1 Select the Selection layer

On the [Layer] palette, select the [Selection area] layer.

2 Select the command

Select [Selection] menu → [Convert Selection Layer to Selection].

3 The selection is created

A selection is created from the [Selection] layer.

View Menu

The [View] menu contains items to adjust the way the canvas is displayed.

Rotate/Invert

Allows you to rotate and reverse the view.

Reset Rotate/Invert	Restores a rotated or reversed view to its original angle.
Reset rotate	Reverts the view angle to 0 (zero) degrees.
Rotate 90	Rotates the view by 90 degrees.
Rotate 180	Rotates the view by 180 degrees.
Rotate 270	Rotates the view by 270 degrees.
Flip horizontal	Reverses the view horizontally.
Flip vertical	Reverses the view vertically.
Rotate left	Rotates the view to the left by a certain angle.
Rotate right	Rotates the view to the right by a certain angle.

Memo

The step by which the view will rotate by [Rotate left] or [Rotate right] is configured by [Angle] on the [Preferences] dialog box → [Canvas]. For details, see "File Menu" → "Preferences [Windows]" → "Canvas" .

Zoom In

Zooms in the screen view by a certain scale.

Memo

The step by which the view will zoom in/out is configured by [Scale] on the [Preferences] dialog box → [Canvas]. For details, see "File Menu" → "Preferences [Windows]" → "Canvas" .

Zoom Out

Zooms out the screen view by a certain scale.

Memo

The step by which the view will zoom in/out is configured by [Scale] on the [Preferences] dialog box → [Canvas]. For details, see "File Menu" → "Preferences [Windows]" → "Canvas" .

Pixel size

Displays in such a size that the relationship between the image pixel and screen pixel is 1 to 1.

Fit to Screen

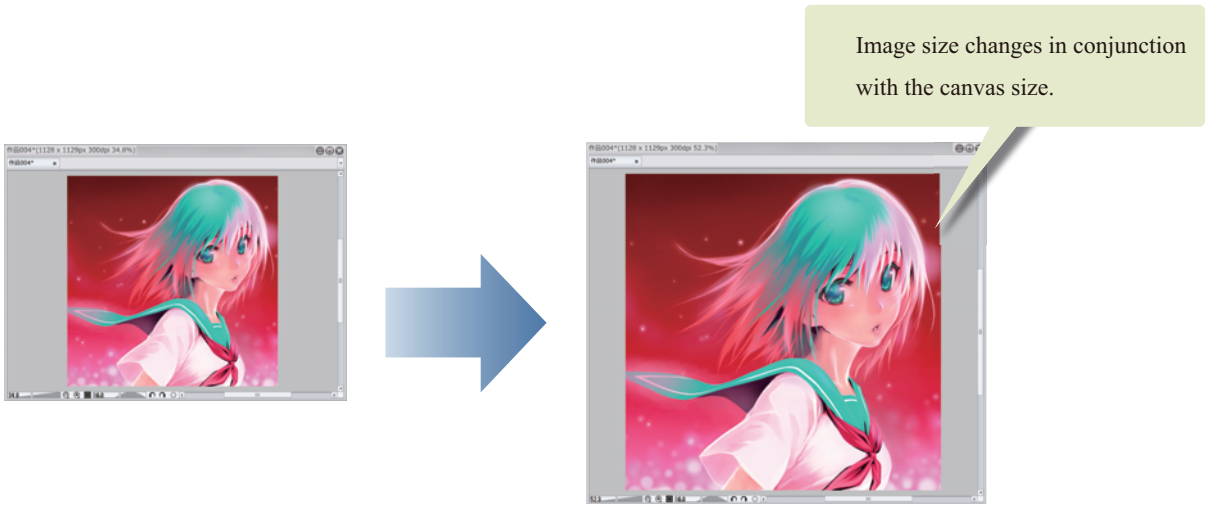
Displays the entire view in the current window.

Reset Display

Resets the position, angle, reversed state of the view, and displays the entire view.

Fit to Navigator

Always displays the entire view by scaling as required so that the image fits in the window size.

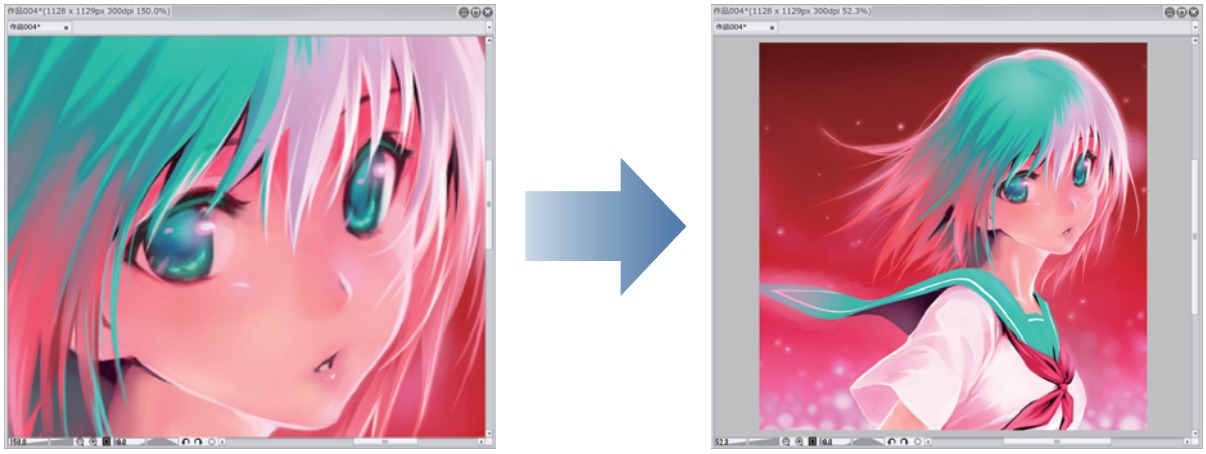


1 Select the command

Select [View] menu → [Fit To Navigator].

2 The adjustment of the view is complete

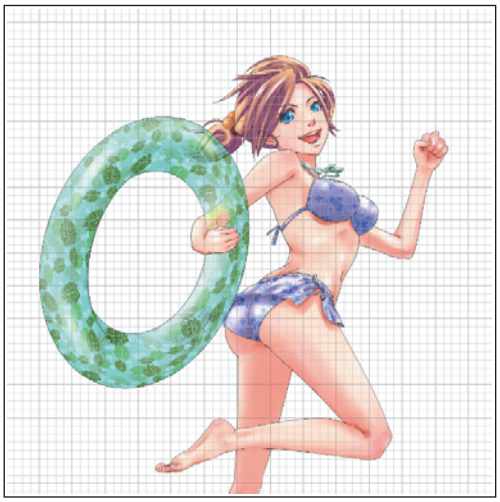
The display position of the view is reset to display the image entirely.



Grid

Displays/hides grids on the screen.

[Grid] OFF



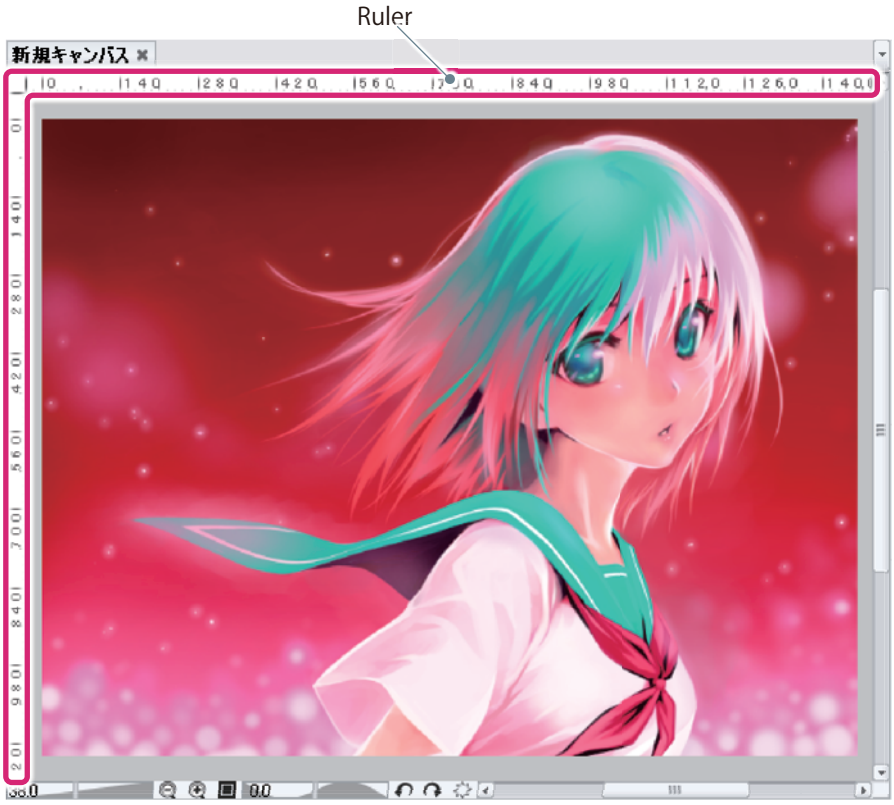
[Grid] ON

Memo

- The color and opacity of the grid lines can be configured on the [Preferences] dialog box. For details on how to configure, see "File Menu" → "Preferences [Windows]" → "Ruler/Frame/Unit" .
- For grid lines, the origin, spacing and division can be configured from [View] menu → [Grid settings]. For details, see "Grid Settings" .
- Turning on [View] menu → [Snap to grid] allows you to draw by snapping to the grid lines.

Ruler

Displays/hides the rulers on the screen.



Memo

Dragging the [Ruler] in the canvas direction allows you to create a [Guide]. Furthermore, dragging the [Guide] outside of the canvas with the [Object] sub tool allows you to remove it. (*)

Grid Settings

Allows you to configure the origin of grid lines and rulers, and the space and number of divisions between grid lines.

[Settings of grid ruler] Dialog Box

Memo

- **The unit for configuring grids and rulers is the [Unit] configured at the time of creating the canvas.**
- **If you change [Unit] using [Change image resolution] or [Change canvas size] of the [Edit] menu, the unit for configuring grids and rulers will also change.**

(1) Original point of grid ruler

You can configure the origin of grid lines and rulers. Select a position from [Top left], [Bottom left], [Center], [Top right], [Bottom right], and [Custom]. Selecting [Custom] allows you to specify the position of the origin numerically.

Memo

When configuring, the position of the origin is previewed as a red x mark on the canvas. You can also specify the origin by dragging the red x mark.

(2) Gap

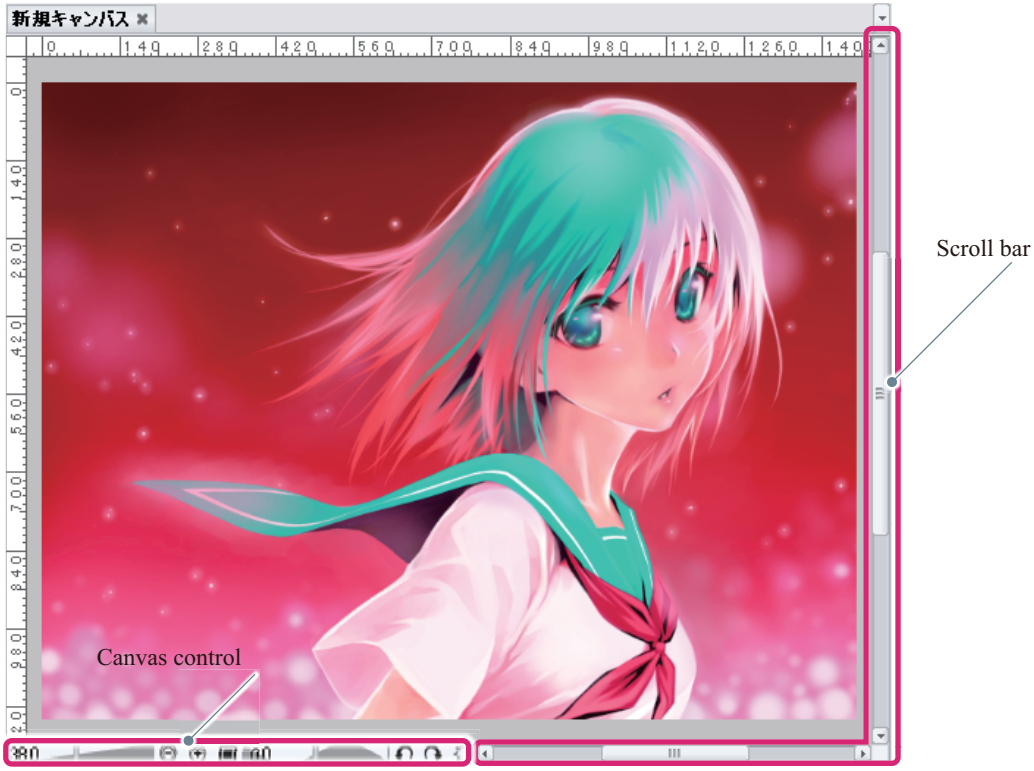
You can configure the space between the thick grid lines.

(3) Number of divisions

You can configure the number of divisions in which the space between the thick grid lines will be divided.

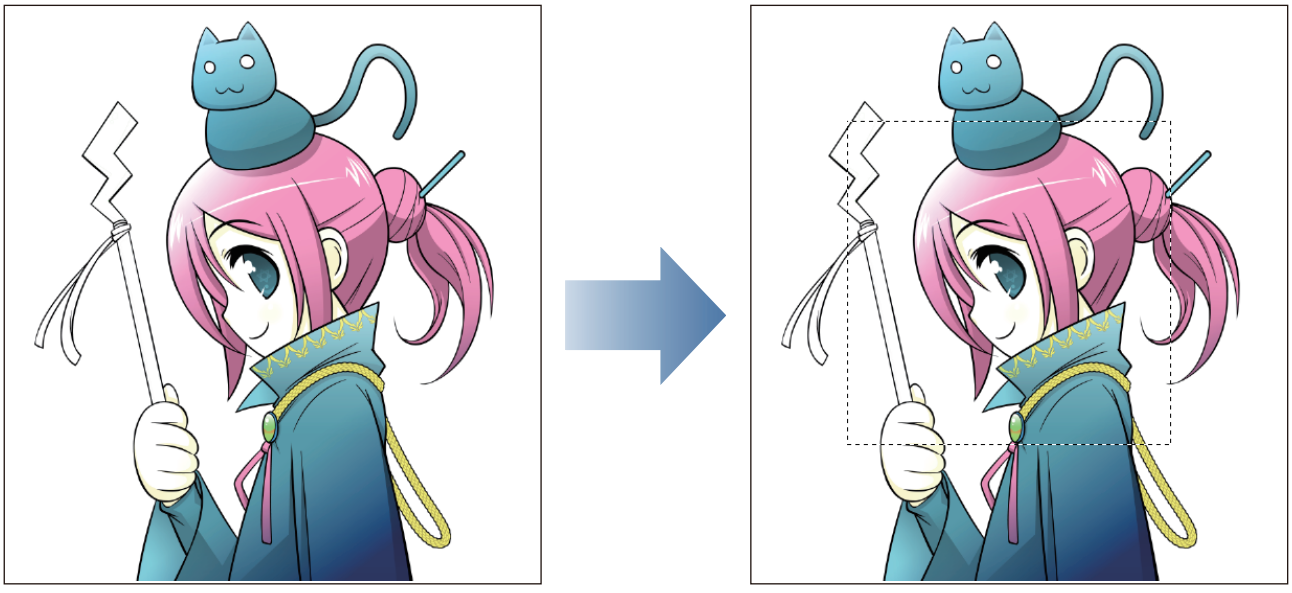
Scroll Bar

Displays/hides the scroll bars on the window. Also displays/hides the [Canvas control] next to the horizontal scroll bar.



Selection Border

Displays/hides the dotted line indicating a selected area.



[Border line of selection area] OFF

[Border line of selection area] ON

Selection launcher

Displays/hides the Selection launcher.

Memo **For details on the Selection launcher, see "Selection Launcher" .**

Selection Launcher Settings

Selecting the menu item displays the [Selection launcher settings] dialog box. The dialog box allows you to add/delete command icons to/from the [Selection launcher], change the display position or image of an icon, arrange icons hierarchically, and so on. For details, see "Configuring the Selection Launcher Settings" .

Crop mark/Default border

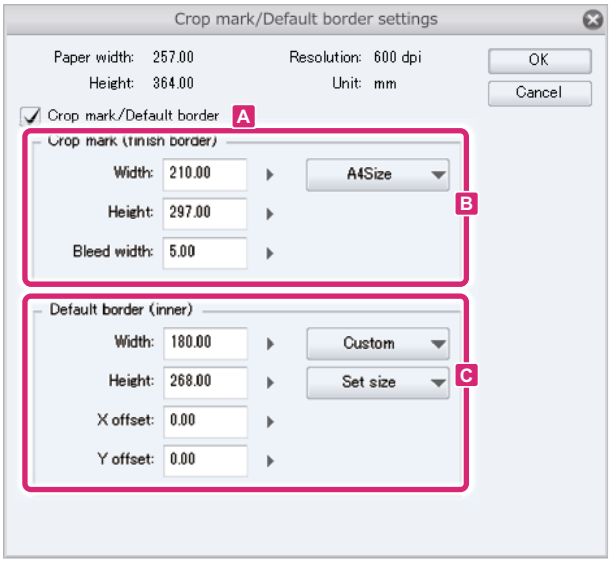
Displays/hides [Crop mark/Default border].

Memo **For details on [Crop mark/Default border], see "Explanation: What Are Default Border, Cropped Border and Bleed Width?" .**

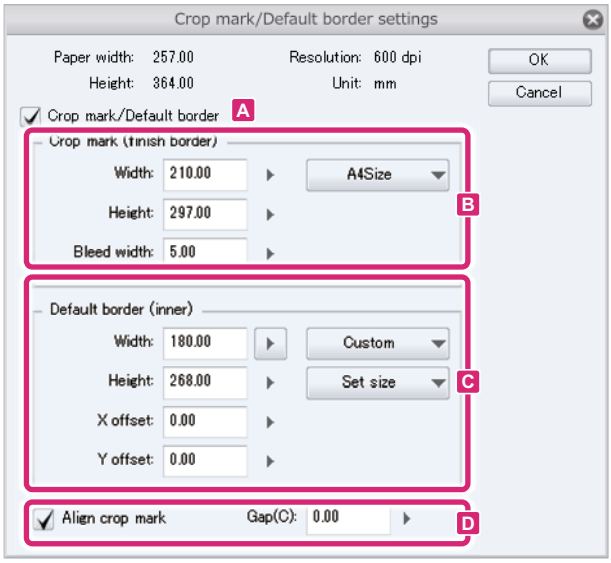
Crop Mark/default border settings

Selecting [View] menu → [crop Mark/default Border settings] displays the [Crop Mark/default border settings] dialog box. On the dialog box, you can edit the crop mark and default border settings.

[Crop Mark/default border settings] Dialog Box



For single page



For 2-page spread

A. Crop Mark/Default border

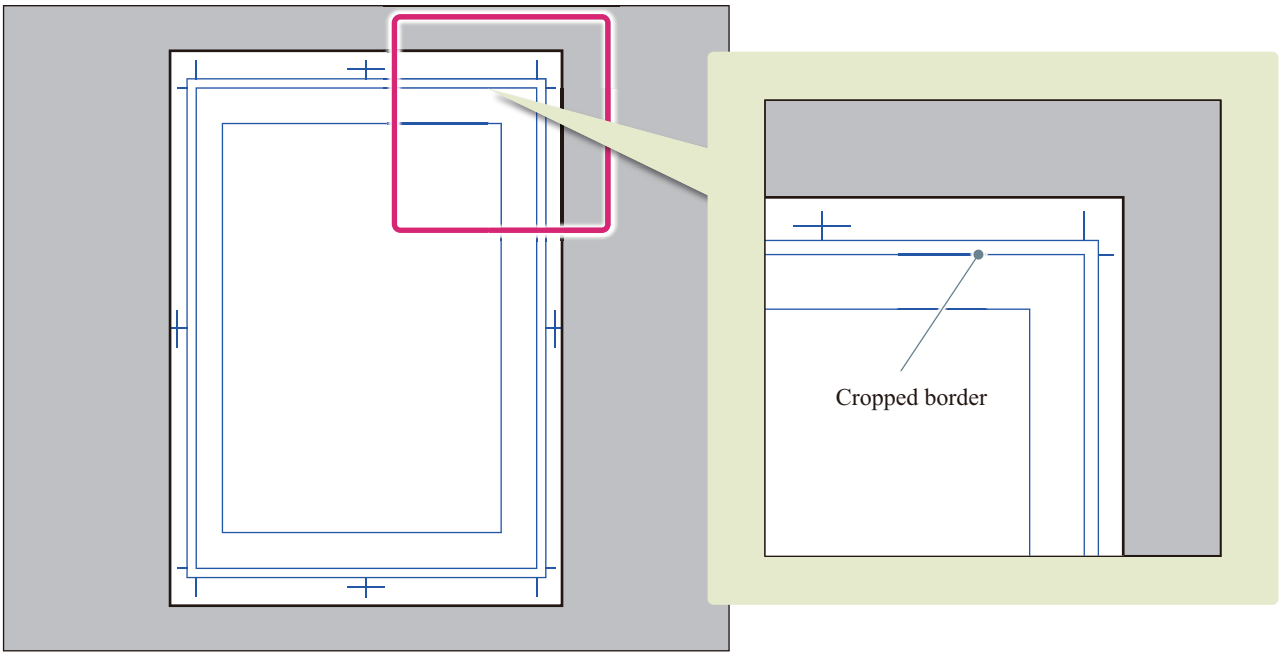
Turning on this item creates [Crop Mark] and [Default border(inner)] on the canvas.

Configuring [Default border], [Crop Mark] and [Bleed] displays guides on the canvas.

Memo **Closing the dialog box with the setting turned off clears [Crop Mark/Default border].**

B. Crop Mark (Finish border)

Configure the line at which the edge of the pages will be trimmed for binding after printing. Drawings within these dimensions are printed.



(1) Default size (Finish border)

Allows you to select a [Width] and [Height] for the cropped border from default sizes.

(2) Cropped border settings

Configures the printable area size and the bleed width.

Width

Horizontal length to print.

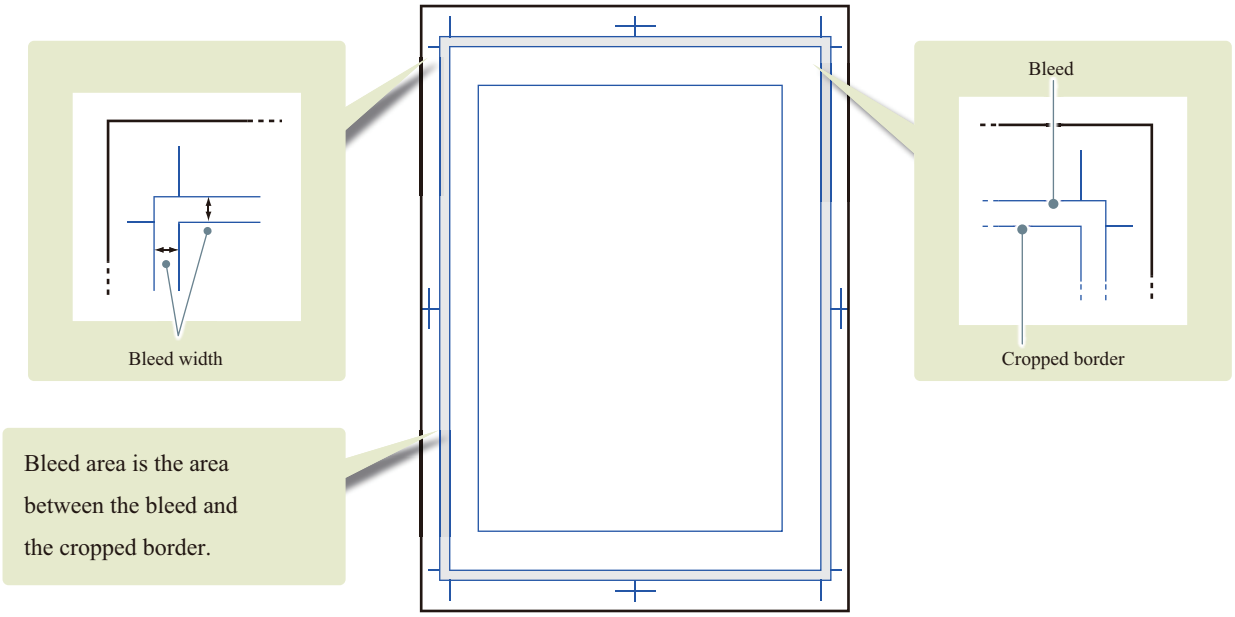
Height

Vertical length to print.

Bleed width

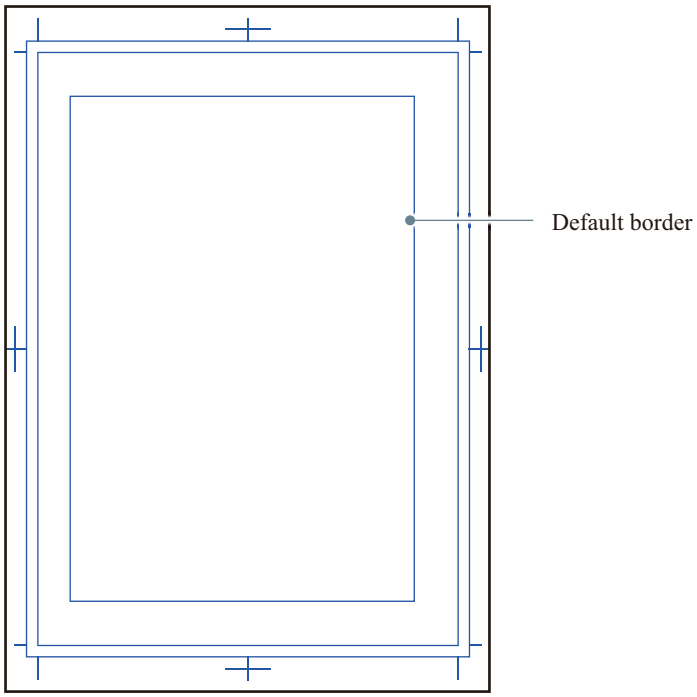
Extra margin to deal with misaligned [Cropped border] lines when trimming the edges of the pages. Draw up to the bleed area to print to the edge of the pages.

The area between the bleed (the first border from the edge) and the cropped border (the second border from the edge) is the bleed area.



C. Default border(inner)

This is the reference border to lay out frames. There are two ways of specifying the default border: by size and position, or by margin.



(1) Default size (inner)

Allows you to select a [Width] and [Height] for the default border from default sizes.

(2) How to specify default border

Configures how to specify the size and position of the default border. Displayed items vary depending on the content configured in [Default border settings].

Set size	Configures the default border based on the size and position.
Set margin	Configures the default border based on the distance from the left, right, top and bottom edges of the paper.

(3) Default border settings

Configure the size and position of the default border. Displayed items vary depending on the item selected in [How to specify default border].

Set size

Configures the default border based on the size and position.

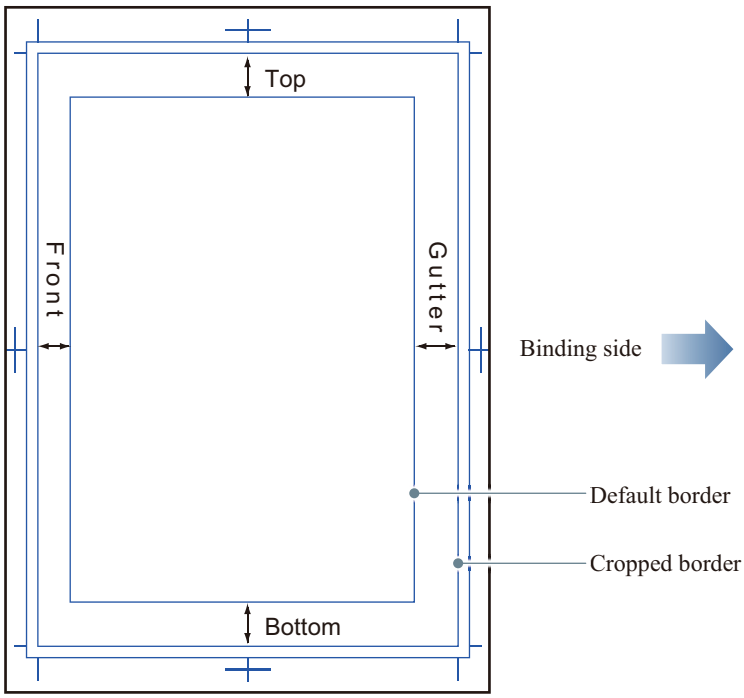
Width	Width of the [Default border].
Height	Length of the [Default border].
X offset	Horizontal position of the [Default border].
Y offset	Vertical position of the [Default border].

Memo

- **When [X offset] is 0, that means the [Default border] is centrally located with respect to the [Cropped border] on the left and right.**
- **When [Y offset] is 0, that means the [Default border] is centrally located with respect to the [Cropped border] at the top and bottom.**

Set margin

Configures the default border based on the distance from the left, right, top and bottom edges of the paper.



Top	Specifies the upper side of the [Default border] as the distance from the top of the paper.
Bottom	Specifies the lower side of the [Default border] as the distance from the bottom of the paper.

Gutter	Specifies the right or left side of the [Default border] as the distance from the "direction of the binding point".
Front	Specifies the right or left side of the [Default border] as the distance from the "outer direction (opposite of binding point)".

D. Align crop mark

When turned off, crop marks are created at the position where the paper edges of the left and right pages match.

When turned on, the crop marks are combined by matching the positions of the cropped borders. The positions of the cropped border on the left and right pages can be adjusted in [Space].

Important **[Align crop mark] displays only for 2-page spreads.**

Story information [EX]

Toggles the visibility of the story information and page number (folio).

Paper

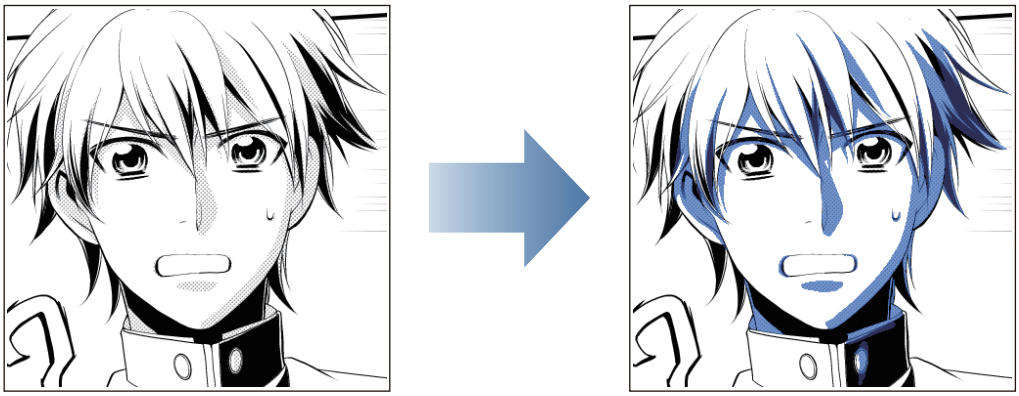
Toggles the visibility of the [Paper] layer.

When turned off, the [Paper] layer is hidden and the transparent parts displayed in a checkered pattern.

Memo **The colors of the checkered pattern can be changed on the [Preferences] dialog box. For details, see "Menu" → "File Menu" → "Preferences [Windows]" → "Canvas" .**

Change Display Of Tone Area

Allows you to show the areas with tone attached.

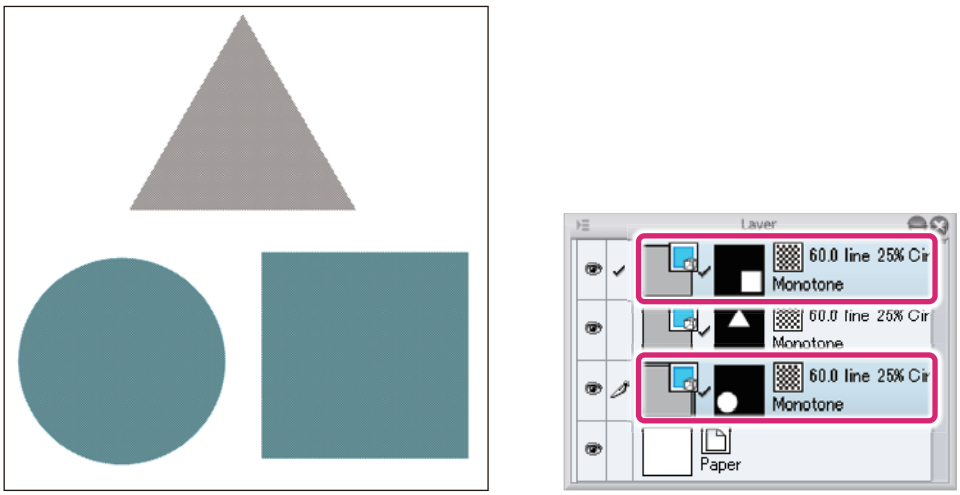


Memo

The expression colors of the areas with tone attached can be configured in [Area expression color] in the items shown when [Tone] is turned on in [Effect] on the [Layer property] palette. For details, see "Layer property palette" → "Functions of layer property Palette" → "Tone"

Show Selected Tone Area

When turned on, selecting a toned layer on the [Layer] palette ahows with color only the toned areas of that layer.

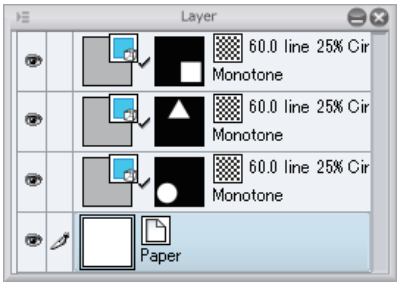


Important

- **When [Tone] is turned on on the [Layer property] palette for [Layer folder], selecting a toned layer in a folder does not show the toned areas of that layer with colors.**
- **When [Edge] is turned on on the [Layer property] palette for [Layer folder], selecting a toned layer in a folder shows the toned areas of that layer with colors, but clipped at the layer below.**

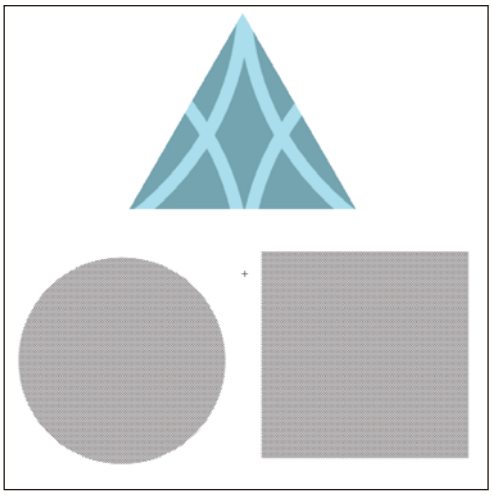
Show All Tone Areas

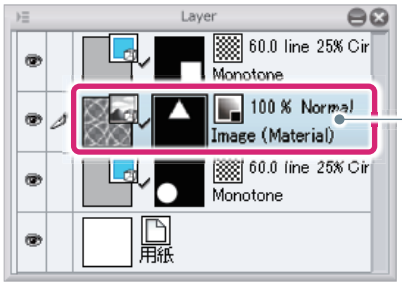
Turning on this menu item displays all tone areas with colors.



Include Image Material Area

Turning on this menu item also displays the areas with [Image material] attached with colors.





[Image material layer]

Important

When [Texture combine] on the [Layer property] palette is turned on, image material areas are not shown with colors even if [Include Image Material Area] is turned on.

Snap to Ruler

Configures snap to ruler.

Turning on this menu item allows you to draw along a ruler or frame border.

Snap to Special Ruler

Configures snap to special ruler.

Turning on this menu item allows you to draw along a special ruler.

Snap to Grid

Configures snap to grid lines or perspective ruler.

Turning on this menu item allows you to draw along the grid lines or the perspective ruler.

Change Special Ruler Snap

Switches the special ruler to snap to when there are multiple [Special rulers] in the ruler range.

Memo

- **Switching the ruler to snap is not necessary for rulers other than [Special rulers].**
- **A drawing is not snapped to a [Special ruler] displayed in green.**
- **You can only snap to one [Special ruler] even if there are multiple [Special rulers] in the ruler range.**

Color profile

Allows you to configure the color profile, rendering intent and used library to preview on the canvas.

Preview settings

Selecting the menu item displays the [Preview of color profile] dialog box. On the dialog box, configure the color conversion to preview the color profile. You can also apply the configured color profile when exporting an image using [Export (Layered)] or [Export (Single Layer)].

[Preview of color profile] Dialog Box

A. Profile for preview

Select the profile for preview the color profile.

Memo

- **CMYK color space is a color space for printing expressed in cyan, magenta, yellow and keytone.**
- **RGB color space is a color space for screen display used in monitors and scanners. Colors are expressed in red, green and blue.**

B. Rendering intent

Configure how to process the color conversion between color spaces with the color management system.

Perceptual	Preserves the visual relationship between colors so that colors are perceived natural even when color values are changed.
Saturation	Compares the maximum highlight in the source color space with the maximum highlight in the destination color space, and shifts the difference.
Relative colormetric	Tries to reproduce vivid colors, even at the expense of color accuracy.
Absolute colormetric	Keeps unchanged the colors that fall inside the destination gamut.

C. Library to use [Windows]

Select the library to use from [Icclibrary] and [MicrosoftICM].

Important **[Library to use] is not available for Mac OS X.**

D. Color correction

Turning on this item allows you to adjust contrast for the image. As for the method of adjustment, you can select from [Tone curve] and [Level correction].

Important **[Color correction] can be configured only when the [Profile for preview] is CMYK.**

Tone curve

Adjusts the contrast of an image using the tone curve.

(1) Channel	Select the channel whose contrast you want to adjust. Available channels vary depending on the selected color profile.
(2) Reset	Initializes the settings.
(3) Tone curve	A graph to adjust the contrast of the image. Drag the control point to adjust. The horizontal axis of the graph is the "input" value (original brightness) and the vertical axis, the "output" value (brightness after adjustment).

Memo

- **To delete a control point, drag it outside the graph.**
- **The horizontal axis of the graph is the "input" value (original brightness) and the vertical axis, the "output" value (brightness after adjustment).**
- **In the background of the graph, the information volume of the dark area (left side) and that of the bright area (right side) of the original image are displayed as a mountain-like graph (histogram). Adjust the tone curve by checking the exposure balance of the original image in the histogram.**

Level correction

Adjusts the contrast of an image using the histogram.

(1) Channel	Select the channel whose level you want to adjust. Available channels vary depending on the selected color profile.
(2) Histogram	A graph where the information volume of the dark area (left side) and that of the bright area (right side) display as a mountain-like shape.
(3) Shadow input	Configure the darkest point in the image. Normally place the darkest point on the left base of the mountain in the [Histogram].
(4) Gamma input	Configure the mean brightness of the image.
(5) Highlight input	Configure the brightest point in the image. Normally place the brightest point on the right base of the mountain in the [Histogram].
(6) Shadow output	Configure the intensity of the darkest point in the image.
(7) Highlight output	Configure the intensity of the brightest point in the image.

Memo

If either edge of the mountain in the histogram does not reach the range edge, move the control point to the edge of the mountain on that side. To correct the entire image, adjust in such a way as to spread the mountain across the entire histogram range.

E. Range in application of settings

Specify the scope of the settings configured on the dialog box.

Also configure whether to save or not the settings configured on the [Preview of color profile] dialog box when saving the file.

Save on canvas	● Saves the settings configured on the [Preview of color profile] dialog box when saving the file. When you reopen the relevant file after saving it, the settings are retained. ● The settings configured on the dialog box also apply to other windows. ● To apply the settings when exporting in a specified format, export in TIFF format (extension: tif), JPEG format (extension: jpg), Adobe Photoshop Document (extension: psd) or Adobe Photoshop Big Document format (extension: psb). In this case, do not forget to turn on [Embed ICC profile] on the [Export settings] dialog box.
Configure only in this window	● Does not save the settings configured on the [Preview of color profile] dialog box when saving the file. When you reopen the relevant file after saving, the settings on the dialog box will be those configured on the [Preferences] dialog box. ● The settings configured on the dialog box do not apply to other windows.

Preview

Turning on this menu item allows you to preview the color profile on the canvas as you configure the [Preview of color profile] dialog box.

Filter Menu

The [Filter] menu allows you to generate blur, cloud patterns and the like for a selected layer.

Blur

This is a filter for blurring an image.

Blur, Blur (Strong)	A filter that averages the border lines and sharp areas of an image to make it smooth.
Gaussian blur	A filter that smooths an image. You can specify its strength.
Smoothing	Applies anti-aliasing to smooth the outline of an image.
Radial blur	A filter that smooths an image by averaging it in a concentric pattern.
Movable blur	A filter that smooths an image by averaging the border lines and sharp areas of the image in a given direction.

Blur, Blur (Strong)

A filter that averages the border lines and sharp areas of an image to make it smooth.

Applicable layers	Raster layer (gray) Raster layer (color)

1 Select the layer

On the [Layer] palette, select a layer. In this example, the [Character] layer is selected.

2 Create a selection

Create a selection in the area where you want apply the filter.

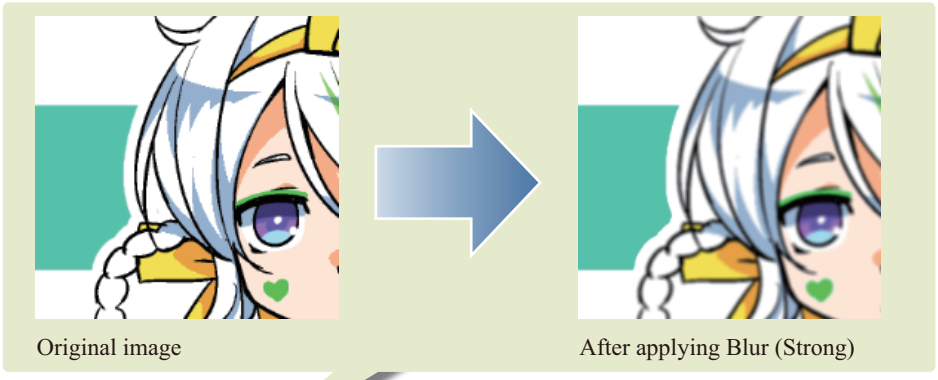
Memo **If a selection is not created, the effect will apply to the entire canvas.**

3 Select the command

Select [Filter] menu → [Blur] → [Blur (Strong)] (or [Blur]).

4 The filter is applied

The filter is applied and the image becomes blurred.



Original image　　After applying Blur (Strong)

Gaussian blur

A filter that smooths an image. You can specify its strength.

Applicable layers	Raster layer (gray) Raster layer (color)

1 Select the layer

On the [Layer] palette, select a layer. In this example, the [Background] layer is selected.

2 Create a selection

Create a selection in the area where you want apply the filter.

Memo

If a selection is not created, the effect will apply to the entire canvas.

3 Select the command

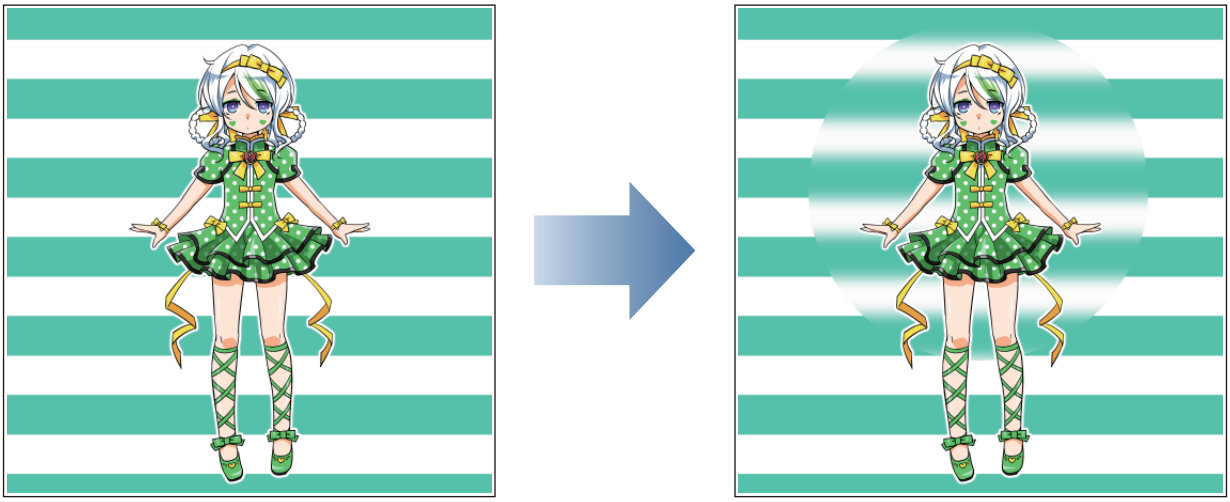
Select [Filter] menu → [Blur] → [Gaussian blur]. The [Gaussian blur] dialog box displays. On the [Gaussian blur] dialog box, configure the effect.

(1) Configure [Blur area].

(2) Click [OK].

4 The filter is applied

The filter is applied and the image becomes blurred.



Original image

After applying Gauss Blur: 80

[Gaussian blur] Dialog Box

(1) Blur area

Configure the area to blur.

(2) Preview

Previews the image on the canvas.

Smoothing

A filter that applies anti-aliasing to an image.

Memo **Anti-aliasing is a function to smooth the outline of an image.**

Applicable layers	Raster layer (gray) Raster layer (color)

1 Select the layer

On the [Layer] palette, select a layer. In this example, the [Line drawing] layer is selected.

2 Create a selection

Create a selection in the area where you want apply the filter.

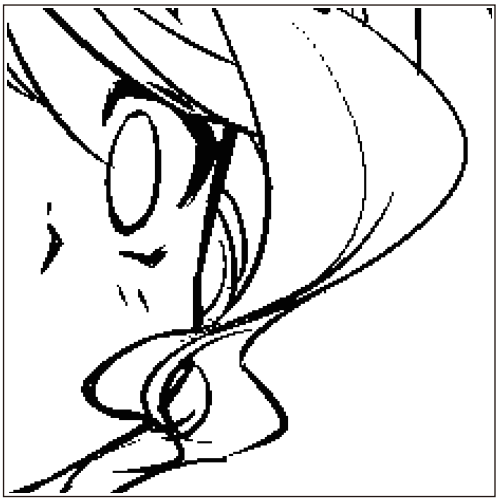
Memo **If a selection is not created, the effect will apply to the entire canvas.**

3 Select the command

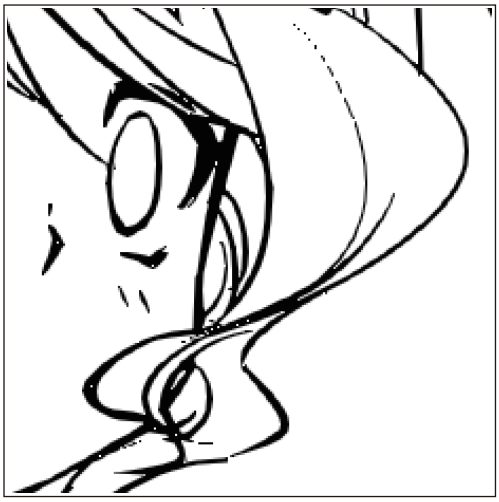
Select [Filter] menu → [Smoothing].

4 The filter is applied

The selected area is anti-aliased and the jags, smoothed.



Original image



After applying Smoothing

Radial blur

A filter that smooths an image by averaging it in a concentric pattern.

Applicable layers	Raster layer (gray) Raster layer (color)

1 Select the layer

On the [Layer] palette, select a layer. In this example, the [Background] layer is selected.

2 Create a selection

Create a selection in the area where you want apply the filter.

Memo

If a selection is not created, the effect will apply to the entire canvas.

3 Select the command

Select [Filter] menu → [Blur] → [Radial blur]. The [Radial blur] dialog box displays. On the [Radial blur] dialog box, configure the effect.

(1) Specify the area, position and method of blurring.

(2) Click the canvas to specify the radial blur center.

(3) Click [OK].

4 The filter is applied

The filter is applied and the image becomes blurred.

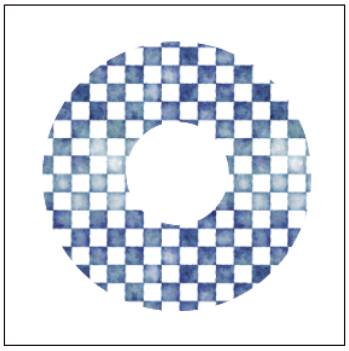
[Radial blur] Dialog Box

(1) Area to blur

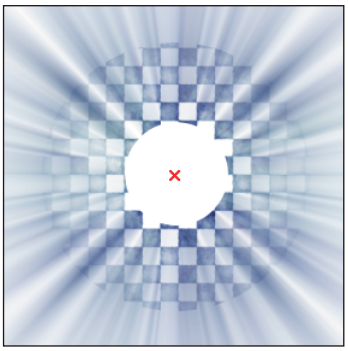
Configure the area to blur.

(2) Position to blur

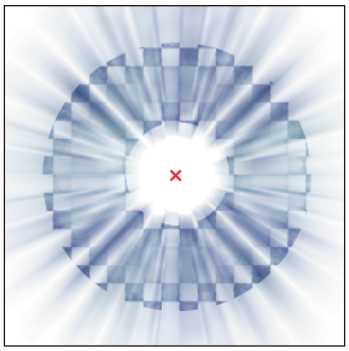
Select the position of the blur from [Back and forth], [Front] and [Back].



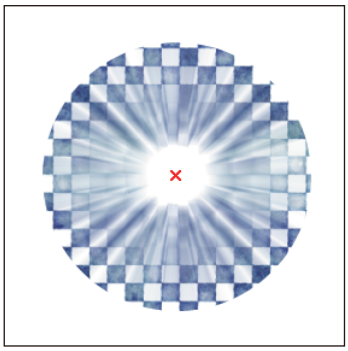
Original image



Front



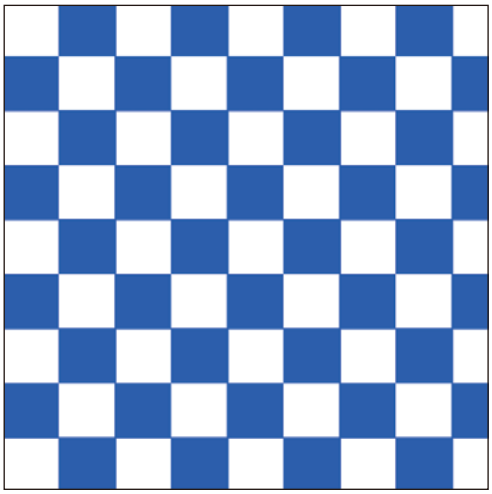
Back and forth



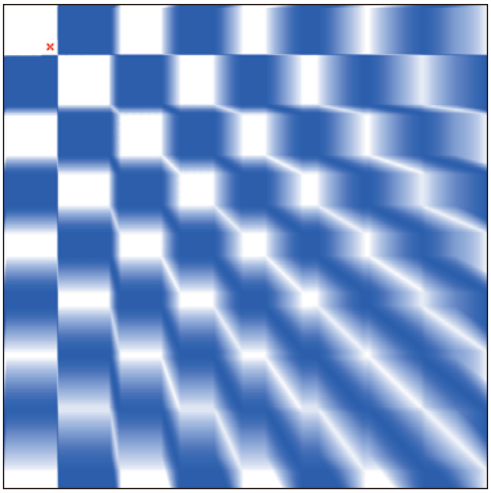
Back

(3) How to blur

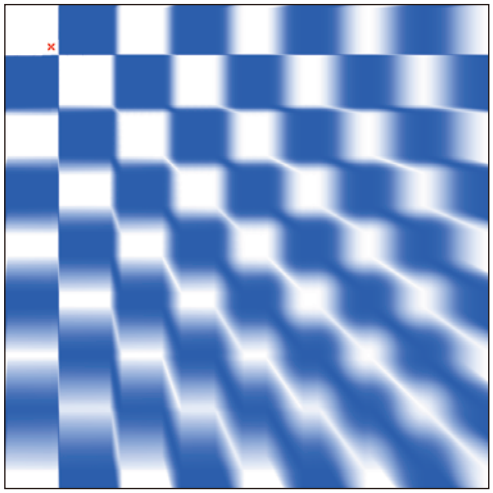
Select the method of blurring from [Box] and [Smooth].



Original image



Box



Smooth

(4) Preview

Previews the image.

Movable blur

A filter that smooths an image by averaging the border lines and sharp areas of the image in a given direction.

Applicable layers	Raster layer (gray) Raster layer (color)

1 Select the layer

On the [Layer] palette, select a layer. In this example, the [Background] layer is selected.

2 Create a selection

Create a selection in the area where you want apply the filter.

Memo **If a selection is not created, the effect will apply to the entire canvas.**

3 Select the command

Select [Filter] menu → [Blur] → [Movable blur]. The [Movable blur] dialog box displays. On the [Movable blur] dialog box, configure the effect.

(1) Specify the area, direction, position and method of blurring.

(2) Click [OK].

4 The filter is applied

The filter is applied and the image becomes blurred.

[Movable blur] Dialog Box

(1) Area to blur

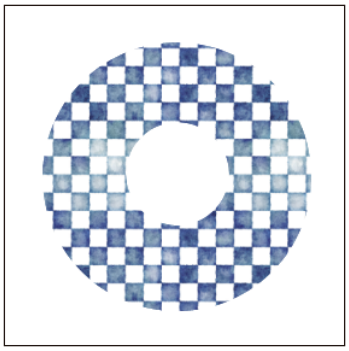
Configure the area to blur.

(2) Direction to blur

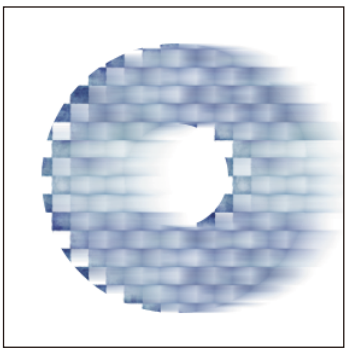
Configure the angle of movement for the blur.

(3) Position to blur

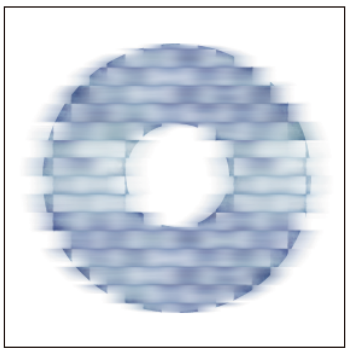
Select the position of the blur from [Back and forth], [Front] and [Back].



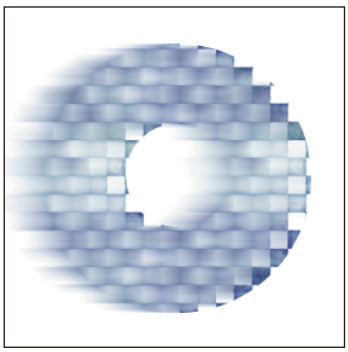
Original image



Front



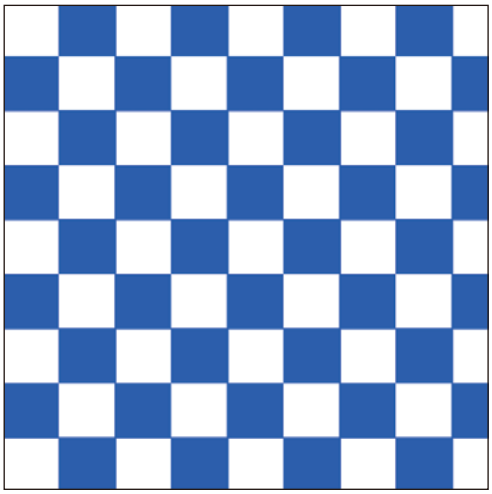
Back and forth



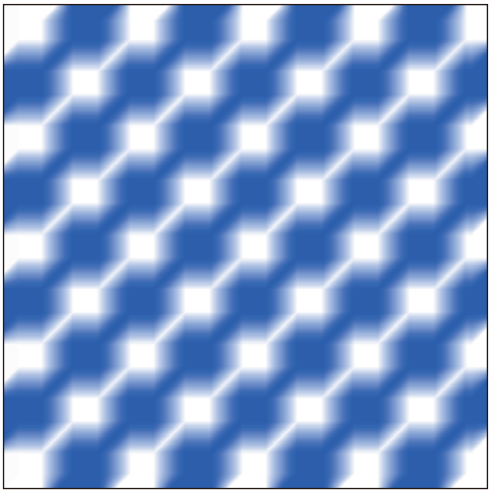
Back

(3) How to blur

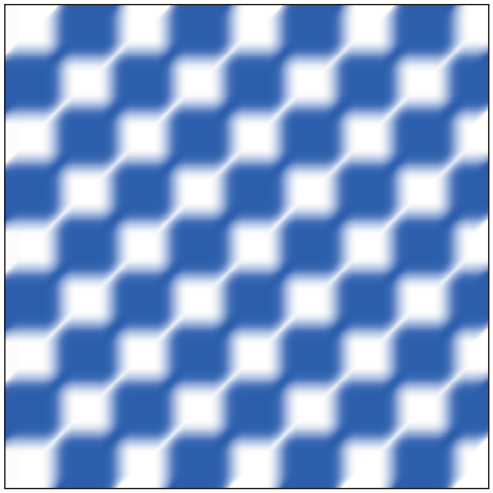
Select the method of blurring from [Box] and [Smooth].



Original image



Box



Smooth

(5) Preview

Previews the image.

Sharp

A filter that sharpens an image.

Sharp, Sharp (Strong) (*)	A filter that sharpens images and the like by enhancing the contrast at the image borders. There are two variants of the filter depending on the strength of its effect: [Sharp] and [Sharp (Strong)].
Unsharp mask	A filter that sharpens images and the like by enhancing the contrast at the image borders. Configure the strength of the effect, threshold value, and so on by specifying numerical values.

Unsharp mask

A filter that sharpens images and the like by enhancing the contrast at the border between colors.

1 Select the layer

On the [Layer] palette, select the layer with the image you want to adjust. In this example, the image layer named [Character] is selected.

2 Create a selection

Create a selection in the area where you want apply the filter.

Memo **If a selection is not created, the effect will apply to the entire canvas.**

3 Select the command

Select [Filter] menu → [Sharp] → [Unsharp mask]. The [Unsharp mask] dialog box displays.

4 Configure the dialog box.

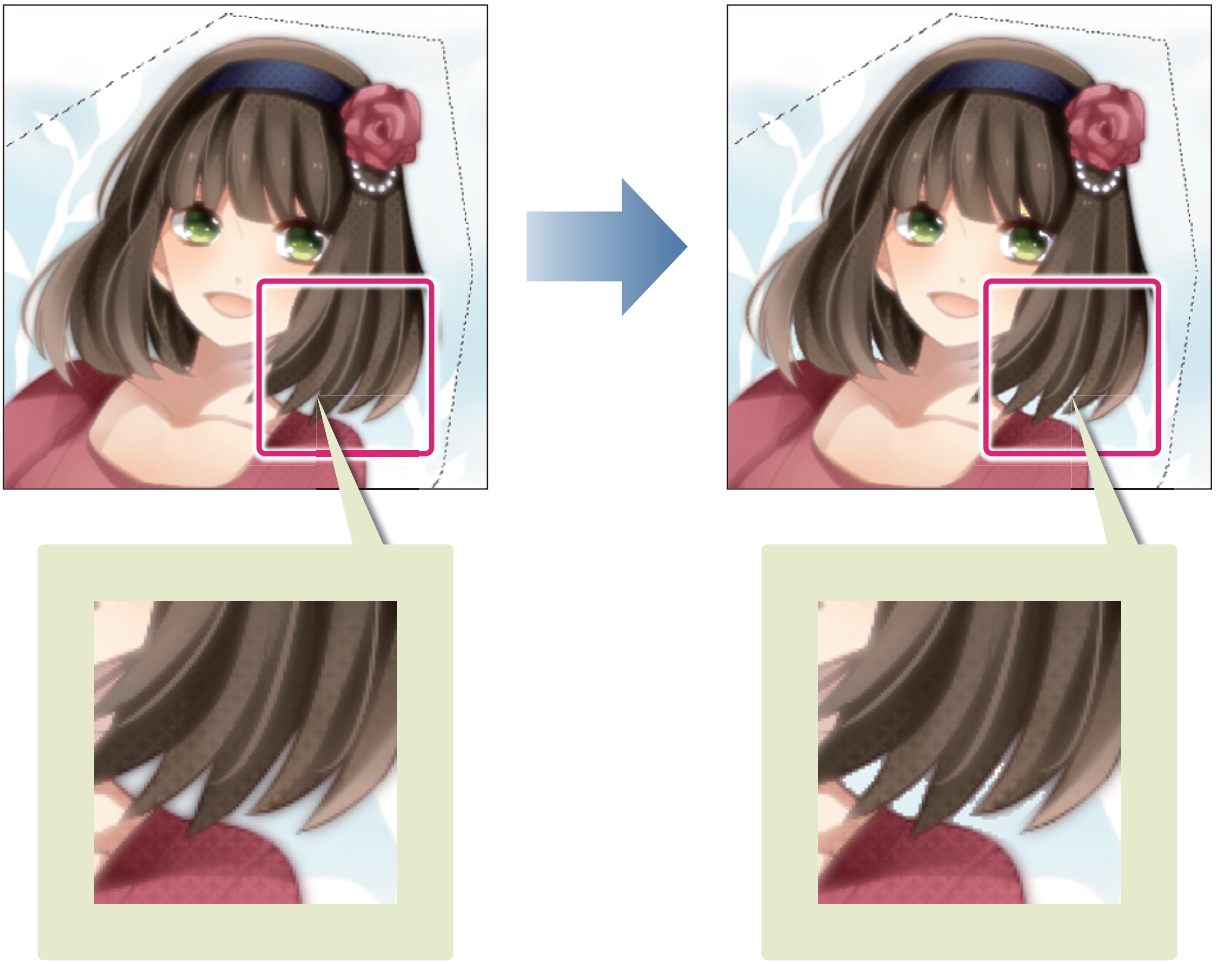
Configure on the [Unsharp mask] dialog box.

(1) Configure the strength of the effect, threshold value, and so on.

(2) Click [OK].

5 The adjustment of the image is complete

The contrast of border lines on the selected layer is adjusted.



[Unsharp mask] Dialog Box

(1) Radius

Allows you to configure the size of the area.

(2) Strength

Allows you to configure the strength of the effect.

(3) Threshold

Allows you to configure the value to recognize a color as different from the density configured as border.

The larger the value, the less likely to recognize the border of colors.

(4) Preview

Previews the image on the canvas.

Sharp, Sharp (Strong) *

Filters that sharpen images and the like by enhancing the contrast at the image borders.

There are two variants of the filter depending on the strength of its effect: [Sharp] and [Sharp (Strong)].

Original image

Sharp

Sharp (Strong)

Effect

A filter that applies special effects to an image.

Mosaic

Pixelizes an image.

1 Select the layer

On the [Layer] palette, select a layer. In this example, the [Rabbit] layer is selected.

2 Create a selection

Create a selection in the area where you want apply the filter.

Memo

If a selection is not created, the effect will apply to the entire canvas.

3 Select the command

Select [Filter] menu → [Effect] → [Mosaic]. The [Mosaic] dialog box displays. On the [Mosaic] dialog box, configure the effect.

(1) Configure the block size.

(2) Click [OK].

4 The filter is applied

The filter is applied and the image is pixelized.

[Mosaic] Dialog Box

(1) Block size

Specify the size to which a pixel will be enlarged.

(2) Preview

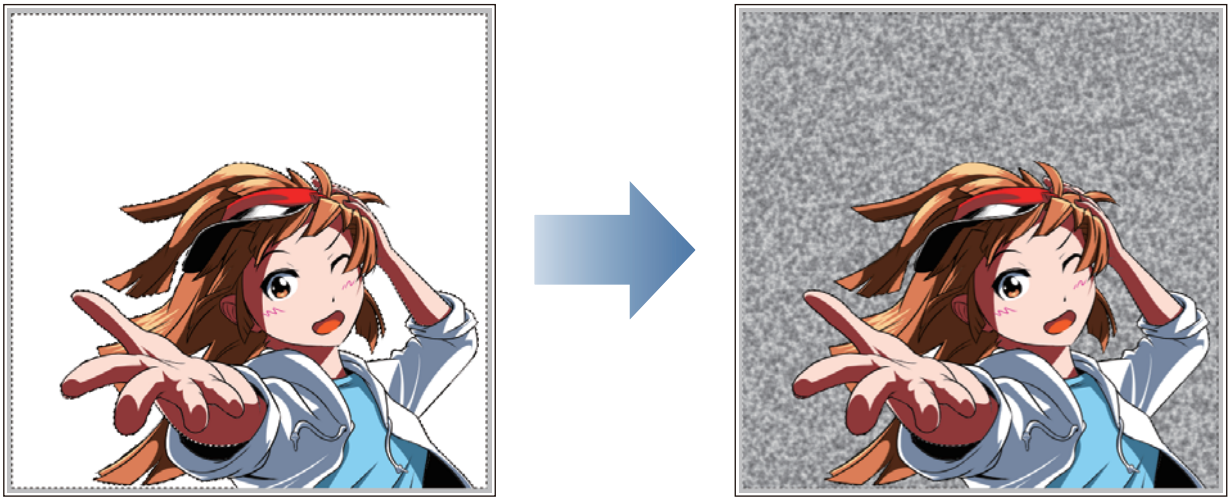
Previews the image on the canvas.

Draw

Perlin noise

Generates a cloud-like pattern.

Applicable layers	Raster layer (gray) Raster layer (color)



Original image

After applying Perlin noise

1 Select the layer

On the [Layer] palette, select a layer. In this example, the [Background] layer is selected.

2 Create a selection

Create a selection in the area where you want apply the filter.

Memo

If a selection is not created, the effect will apply to the entire canvas.

3 Select the command

Select [Filter] menu→ [Draw] → [Perlin noise]. The [Perlin noise] dialog box displays. On the [Perlin noise] dialog box, configure the effect.

(1) Configure the pattern.

(2) Click [OK].

4 The filter is applied

The filter is applied and the pattern, drawn.

[Perlin noise] Dialog Box

(1) Scale

Configure the pattern size. The larger the value, the larger will be the size of the pattern.

(2) Amplitude

Configure the amplitude of the pattern. The larger the value, the higher will be the contrast of the pattern.

(3) Attenuation

The larger the value, the rougher will be the pattern.

(4) Repeat

The larger the value, the weaker will be the blur.

(5) Offset X

Configure the starting position (horizontal axis) of the pattern.

(6) Offset Y

Configure the starting position (vertical axis) of the pattern.

(7) Preview

Previews the image on the canvas.

Window Menu

The [Window] menu is for performing operations related to the windows.

Canvas

Allows you to perform operations related to canvases.

New window	Allows you to display the currently edited [Canvas] window in multiple windows.
Cascade	Displays separate [Canvas] windows stacked one on top the other.
Tiled	Displays all [Canvas] windows one next to the other.
Window switching during editing	You can bring the [Canvas] window of the selected file name to the forefront.

New window

Displays the currently edited [Canvas] window in multiple windows.

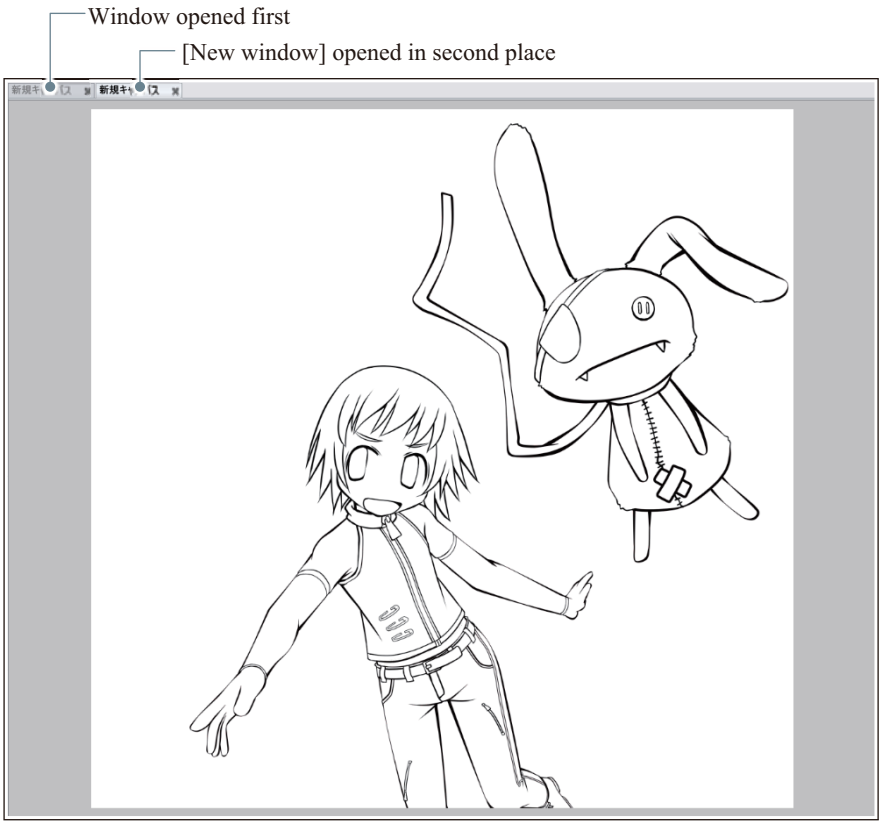
Memo **This is useful when you want to zoom in a portion of the image but simultaneously view the entire image.**

1 Select the command

Select [Window] menu → [New window].

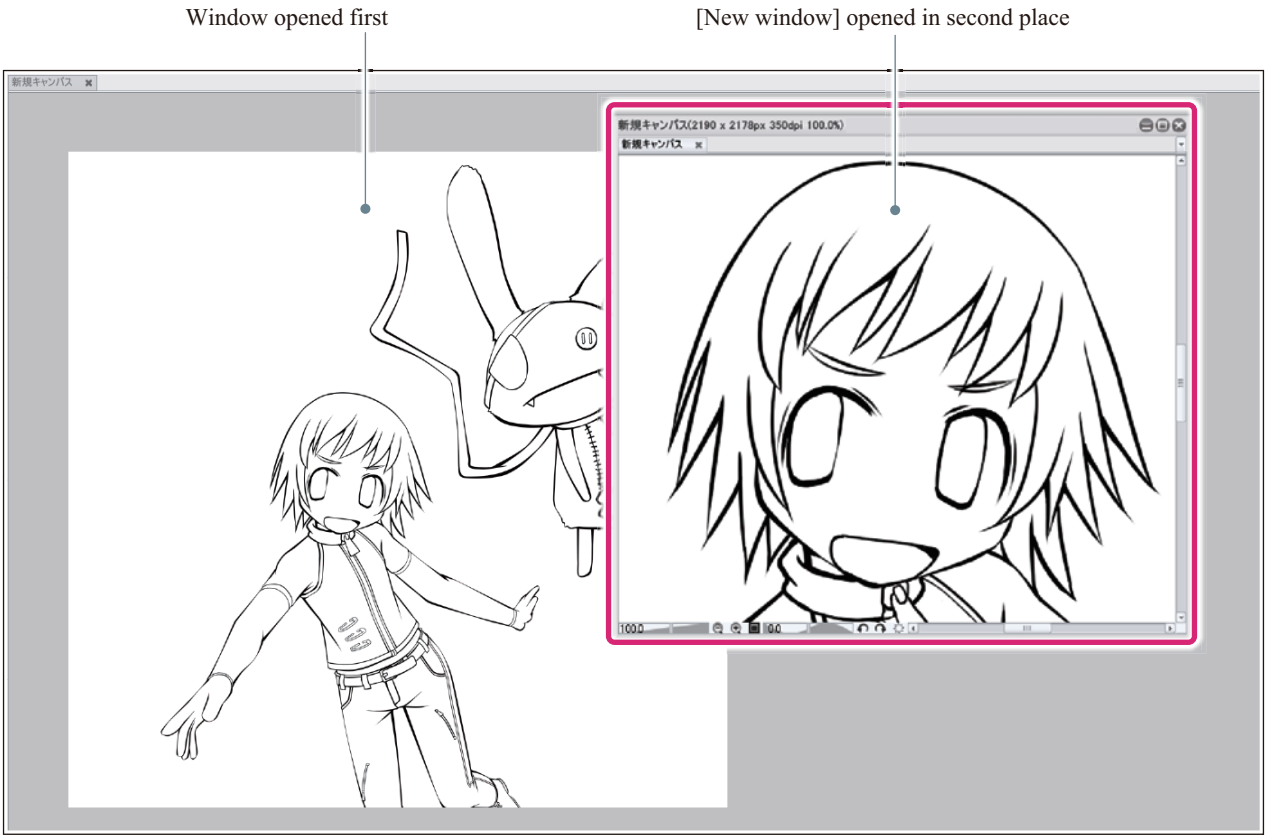
2 The adjustment of the view is complete

The second window displays.

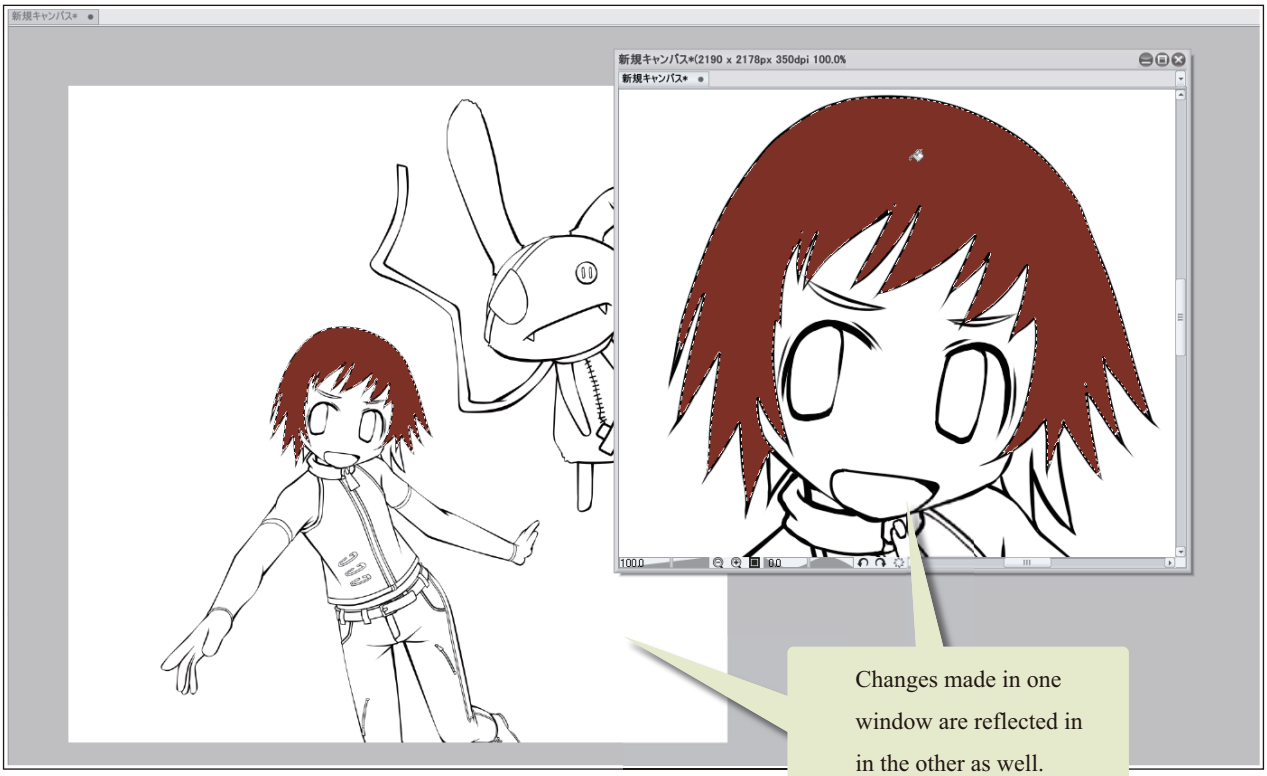


The [New window] can be displayed as a separate window to zoom in.

Memo **For how to display the [Canvas] window in separate windows, see "Displaying a Canvas Individually" .**



Since the data are the same, making changes in one changes the other window as well.



Cascade

Displays separate [Canvas] windows stacked one on top the other.

Tiled

Displays all [Canvas] windows one next to the other.

Window switching during editing

In the lower part of the menu item list accessed by selecting [Window] menu → [Canvas], there is a list of the file names open in the [Canvas] window.

Selecting a file name brings the [Canvas] window of the selected file name to the forefront.

Workspace

In Manga Studio 5.0, you can have the layout of palettes, shortcut settings, command bar settings and unit of length registered as a "workspace". You may have one workspace for each process and work by switching among them.

Selecting [Window] menu → [Workspace] allows you to register, load as well as manage workspaces.

Reset to Default

Restores the palette layout to the layout in the workspace immediately after Manga Studio 5.0 installation.

Register Workspace

Registers the layout of palettes, shortcut settings, command bar settings and unit of length as a "workspace".

Important

- **Making changes to a loaded workspace automatically updates that workspace with the changes that have been made.**
- **Selecting [Window] menu → [Workspace] → [Reset "selected workspace name"] restores the workspace to the state when it was initially registered.**
- **If a workspace is registered with the same name as one existing, the existing one is overwritten.**

Memo

- **For shortcut settings, see "File Menu" → "Shortcut settings [Windows]" .**
- **For command bar settings, see "File Menu" → "Command bar settings [Windows]" .**
- **For unit of length, see "File Menu" → "Preferences [Windows]" → "Ruler/Frame/Unit" .**

1 Decide the layout of palettes

Lay out the palettes.

2 Select the command

Select [Window] menu → [Workspace] → [Register Workspace].

3 Name the workspace

The [Register workspace] dialog box displays. Name the workspace.

(1) Input a name for the workspace in [Name].

(2) Click [OK].

4 The registration of the workspace is complete

The workspace is registered as configured.

Memo

For how to load a registered workspace, see "Load workspace" .

Manage Workspace

Selecting [Window] menu → [Workspace] → [Manage Workspace] displays the [Manage workspace] dialog box. On the dialog box, you can rename and delete registered workspaces.

[Manage workspace] Dialog Box

(1) Workspace list

Displays a list of registered workspaces.

(2) OK

Commits the configured content and closes the dialog box.

(3) Cancel

Cancels the configured content and closes the dialog box.

(4) Delete

Clicking the button deletes the workspace selected in the [Workspace list].

(5) Change name of settings

Clicking the button allows you to rename the workspace selected in the [Workspace list].

Memo **You can also rename by double clicking the workspace name on the [Workspace list].**

Reset Workspace

Restores the selected workspace to the state when it was registered.

Memo **In the menu, this item is displayed as [Reset "selected workspace name"].**

Load workspace

Loads a registered workspace.

Important

- **Making changes to a loaded workspace automatically updates that workspace with the changes that have been made. Loading such workspace after it has been automatically updated loads the workspace with changes.**
- **Selecting [Window] menu → [Workspace] → [Reset "selected workspace name"] restores the workspace to the state when it was initially registered.**

Memo

Manga Studio 5.0 comes with default workspaces for [Illustrations] and [Comics], and default workspaces [By category].

1 Select the workspace

In the lower part of the menu item list accessed by selecting [Window] menu → [Workspace], there is a list of registered workspaces. Select the workspace you want to load.

Memo

The workspace currently in use is indicated by a check mark.

2 Select the items to load

The [Load workspace] dialog box displays. On the dialog box, specify the items other than the palette layout you want to load.

(1) Specify items to load.

(2) Click [OK].

Memo

Turning on [Always use these settings hereafter] will load the items selected here without displaying the [Load workspace] dialog box the next time you load this workspace.

3 The workspace is loaded

The workspace is loaded as configured in the dialog box.

Command bar

Displays/hides the [Command bar].

[Command bar]

Tool

Displays/hides the [Tool] palette.

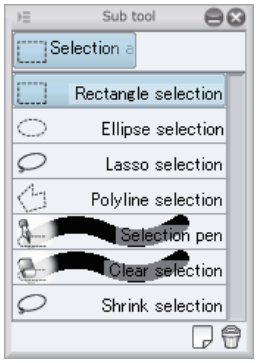
Memo **For details on the [Tool] palette, see "Tool Palette" .**

[Tool] palette

Sub tool

Displays/hides the [Sub tool] palette.

Memo **For details on the [Sub tool] palette, see "Sub tool Palette" .**

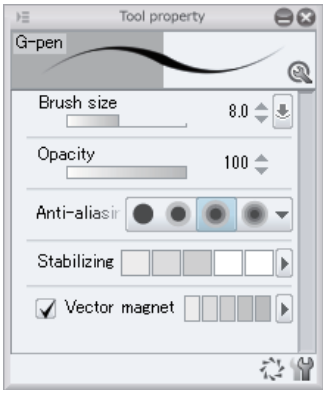


[Sub tool] palette

Tool property

Displays/hides the [Tool property] palette.

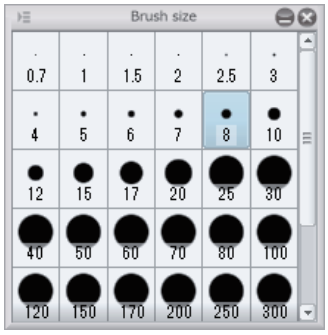
Memo **For details on the [Tool property] palette, see "Tool property Palette" .**



[Tool property] palette

Brush size

Displays/hides the [Brush size] palette.



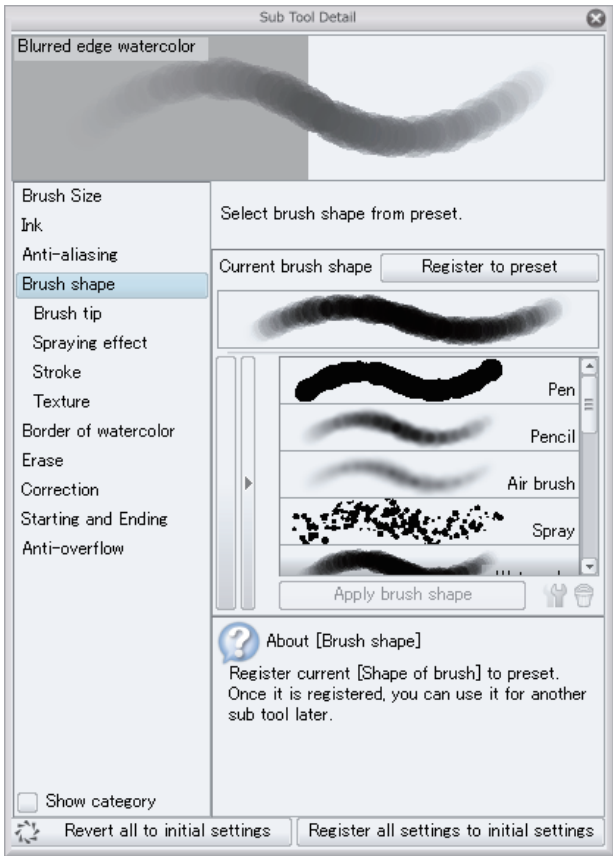
[Brush size] palette

Memo **For details on the [Brush size] palette, see "Brush size Palette" .**

Sub tool detail

Displays/hides the [Sub tool detail] palette.

Memo **For details on the [Sub tool detail] palette, see "Sub tool detail Palette" .**

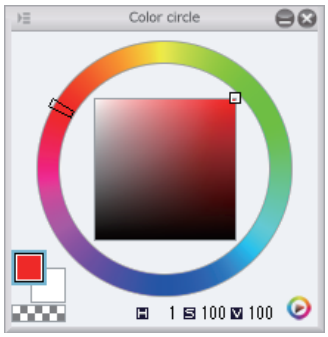


[Sub tool detail] palette

Color wheel

Displays/hides the [Color wheel] palette.

Memo **For details on the [Color wheel] palette, see "Color wheel Palette" .**

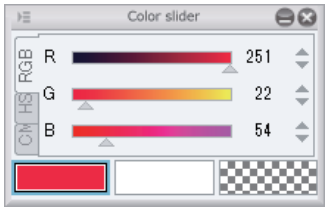


[Color circle] palette

Color slider

Displays/hides the [Color slider] palette.

Memo **For details on the [Color slider] palette, see "Color slider Palette" .**

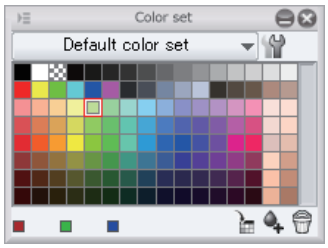


[Color slider] palette

Color set

Displays/hides the [Color set] palette.

Memo **For details on the [Color set] palette, see "Color set Palette" .**

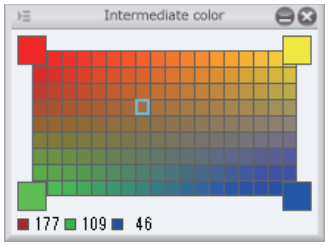


[Color set] palette

Intermediate color

Displays/hides the [Intermediate color] palette.

Memo **For details on the [Intermediate color] palette, see "Intermediate color Palette" .**



[Intermediate color] palette

Approximate color

Displays/hides the [Approximate color] palette.

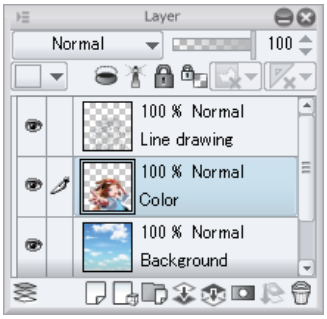
Memo **For details on the [Approximate color] palette, see "Approximate color palette" .**

[Approximate color] palette

Layer

Displays/hides the [Layer] palette.

Memo **For details on the [Layer] palette, see "Layer Palette" .**

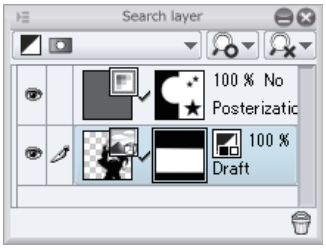


[Layer] palette

Search layer

Displays/hides the [Search layer] palette.

Memo **For details on the [Search layer] palette, see "Search layer Palette" .**

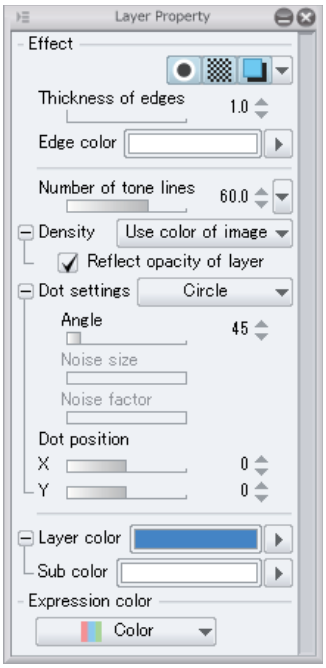


[Search layer] palette

Layer property

Displays/hides the [Layer property] palette.

Memo **For details on the [Layer property] palette, see "Layer property palette" .**



[Layer property] palette

Navigator

Displays/hides the [Navigator] palette.

Memo **For details on the [Navigator] palette, see "Navigator Palette" .**

[Navigator] palette

Sub view

Displays/hides the [Sub view] palette.

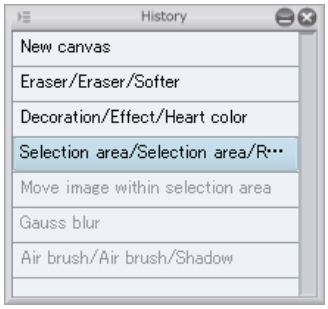
Memo **For details on the [Sub view] palette, see "Sub view Palette" .**

[Sub view] palette

History

Displays/hides the [History] palette.

Memo For details on the [History] palette, see "History palette".

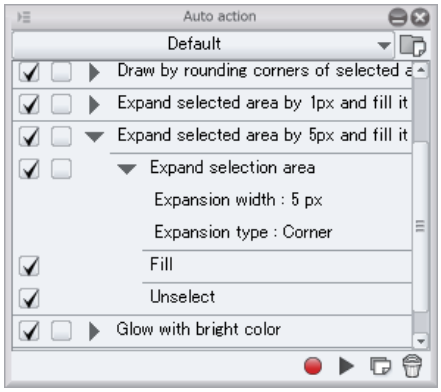


[History] palette

Auto action

Displays/hides the [Auto action] palette.

Memo For details on the [Auto action] palette, see "Auto action palette".

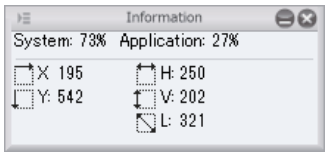

Auto action
Default
Draw by rounding corners of selected a
Expand selected area by 1px and fill it
Expand selected area by 5px and fill it
Expand selection area
Expansion width : 5 px
Expansion type : Corner
Fill
Unselect
Glow with bright color

[Auto action] palette

Information

Displays/hides the [Information] palette.

Memo **For details on the [Information] palette, see "Information Palette" .**

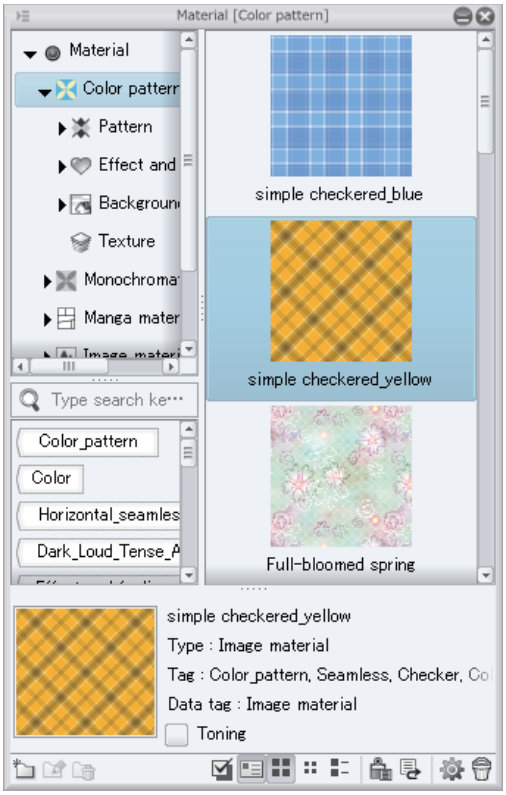


[Information] palette

Material

Displays/hides the [Material] palettes.

Memo **For details on the [Material] palettes, see "Material Palettes" .**



[Material] palette

Show/Hide All Palettes

Displays/hides the currently displayed [palettes].

Hide Title Bar/Hide Menu Bar

The Windows version allows you to hide the [Title bar] and [Menu bar] on the Main window.

The Mac OS X version allows you to hide the [Title bar] on the Edit window.

To Hide the Title Bar

Select [Window] menu → [Hide title bar] when the [Title bar] and [Menu bar] are displayed. The [Title bar] is hidden. Hiding the [Title bar] maximizes the window view.

To Hide the Menu Bar [Windows]

Select [Window] menu → [Hide menu bar] when the [Title bar] is hidden and the [Menu bar] is displayed. The [Menu bar] is hidden.

To Restore the Title Bar and Menu Bar

In Windows version, when the [Title bar] and [Menu bar] are hidden, press the [Tab] key while holding the [Shift] key down. The [Title bar] and [Menu bar] are displayed.

In Mac OS X version, when the [Title bar] is hidden, press the [Tab] key while holding the [Shift] key down. The [Title bar] is displayed.

Show Canvas Tab [Windows]

Shows/Hides the canvas tab.

- When the menu item is turned on, the canvas tab is displayed at any time.
- If the menu item is turned off, the canvas tab is not displayed when there is only one canvas opened in the main window.

If the canvas is displayed in a separate window, the tab is displayed even when [Show Canvas Tab] is turned off.

Help Menu

The following describes the Manga Studio 5.0 [Help] menu.

Manga Studio 5.0 website

Starts the Web browser to display the "Manga Studio 5.0" Web page.

Manga Studio 5.0 Manual

Selecting this item starts the Web browser to display the Manga Studio 5.0 online manual.

To use the online manual, you need to be connected to the Internet.

Training and Tutorials

Selecting this item starts the Web browser to display the "Training and Tutorials" course.

To use this online course, you need to be connected to the Internet.

Register Manga Studio 5

Starts the Web browser to display the "Manga Studio 5.0 User registration" Web page.

Graphics performance check

Selecting this item starts a test that checks whether the graphics capability of your computer is suitable for running Manga Studio 5.0.

In the results, you will find tips to improve the graphics capabilities of your computer and the like.

Register license [Windows]

Registers the license for Manga Studio 5.0 started as a trial version. For details on license registration, see the "Manga Studio 5.0" Web page.

Check License [Windows]

If connection to the Internet was unavailable at the time of license check, a license check error displays.

Selecting [Help] menu → [Check license] allows you to check license manually beforehand, and independently of the number of remaining days. However note that in this case, the fixed period of time to the next license check will be counted from the day on which you performed the license check.

Memo

- **The use of [Check license] does not extend the trial period of the trial version (when time-limited trial version is registered).**
- **When the license check becomes disabled because the trial period has expired or any other reason, continued use of the application is possible as a feature-limited trial version.**

About Manga Studio 5.0 [Windows]

Displays the product information screen of your Manga Studio 5.0. There, you can check information such as the version of your Manga Studio 5.0.

Version information [Windows]

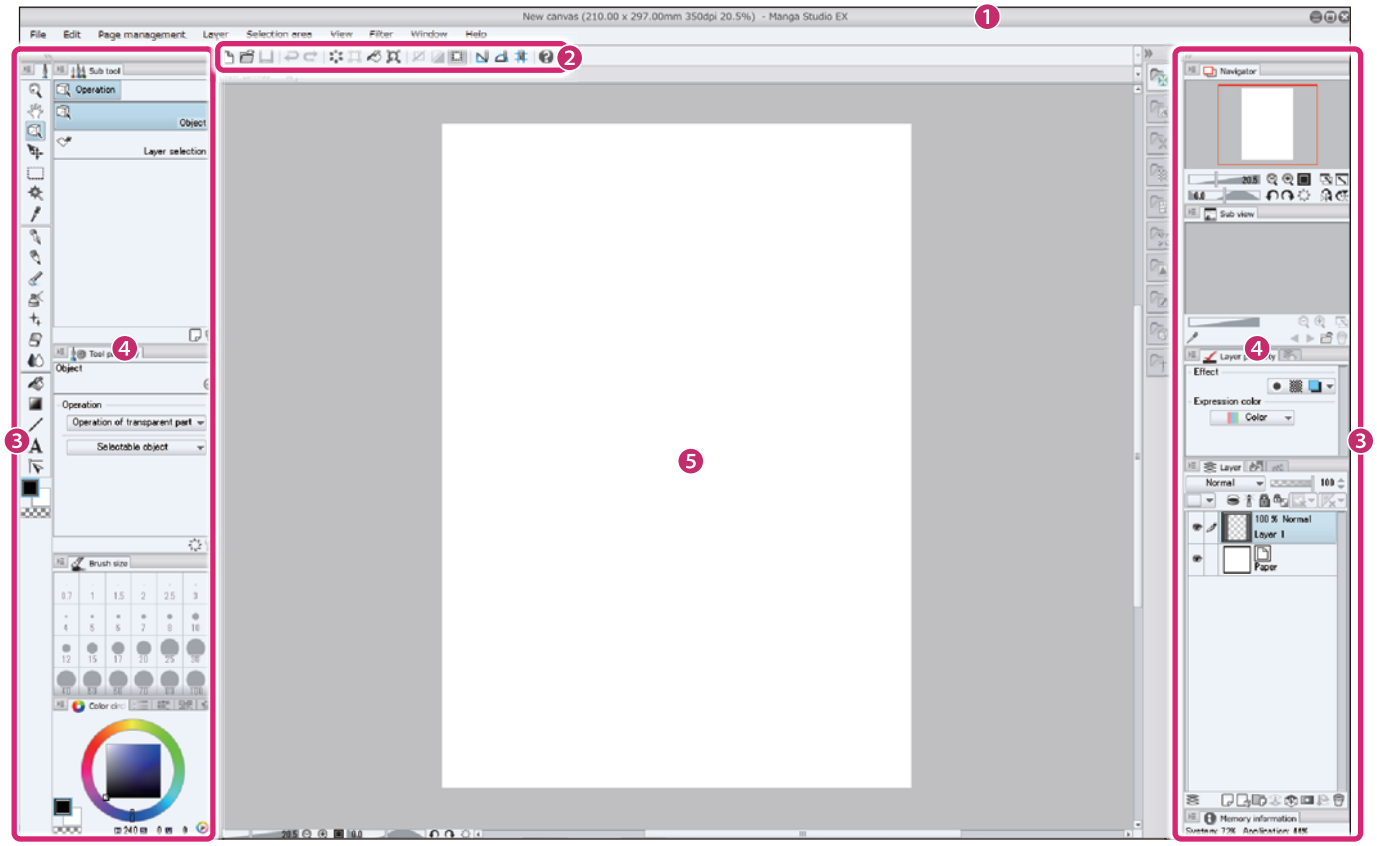
Displays the screen for checking the version of your Manga Studio 5.0.

Explanation: Window Operation

This chapter describes the Manga Studio 5.0 screen components and how to operate the palettes, palette docks and canvas windows.

Manga Studio 5.0 Screen Components

The Manga Studio 5.0 main window roughly consists of the following components.



(1) Title bar

Displays the name of the file being edited, size, resolution, scale of the canvas, name of the software, and so on.

(2) Command bar

Allows you to use various functions by clicking the icons. You can customize the icon view by displaying the icon of frequently used functions, for example. For details on the operating procedure, see "File Menu" → "Command bar settings [Windows]" .

(3) Palette dock

Area accommodating multiple palettes. For details on the operating procedure, see "File Menu" → "Palette and Palette Dock Operation" .

(4) Palette

Screen for configuring settings. There are various types of palettes. In this screen, palettes are accommodated in palette docks. However, they can also be displayed individually as windows or dialog boxes. For details on palette operation, see "Palette and Palette Dock Operation" .

(5) Canvas window

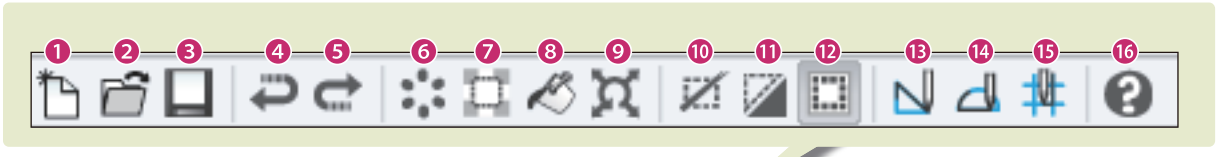
Area for editing images as well as drawing. For details, see "Canvas Window" .

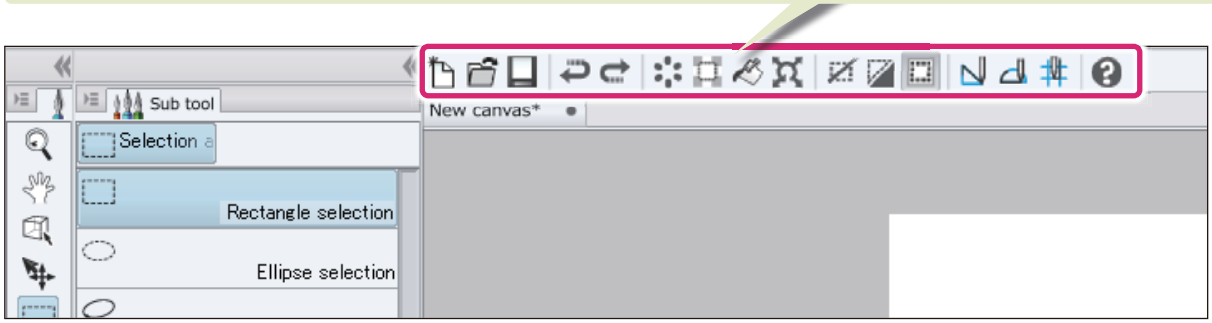
Command Bar

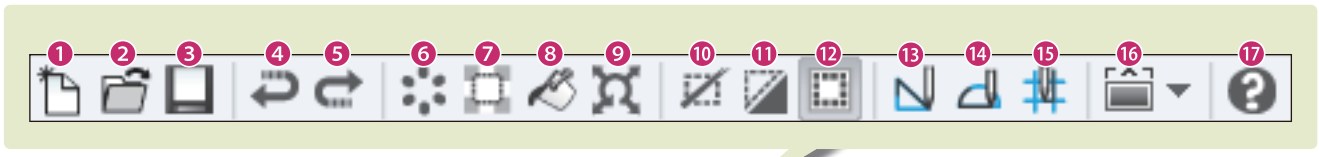
The area on the upper part of the main window where function icons are arranged is called "Command bar". Clicking an icon on the [Command bar] is equivalent to executing a menu function.

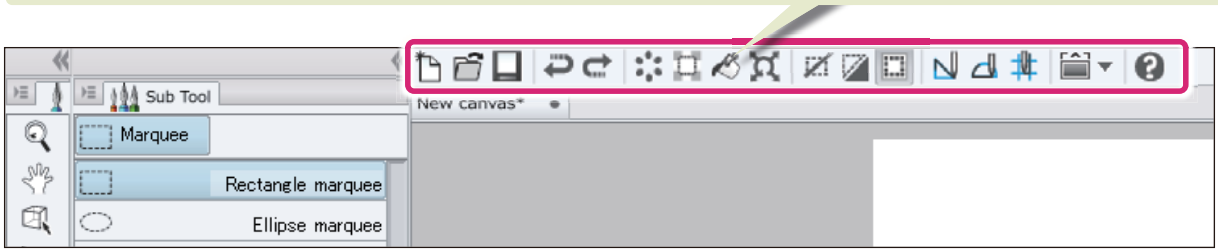
Memo

Selecting [File] menu → [Command bar settings] allows you to customize the items to display on the [Command bar]. For details, see "Command bar settings [Windows]" .









(1) New

Creates a new canvas necessary for creating an illustration.

(2) Open

Opens a saved illustration or image for re-editing.

(3) Save

Saves an illustration or image being created.

(4) Undo

Clicking it cancels the last operation.

(5) Redo

Clicking it redoes the undone operation.

(6) Clear

Clears the content drawn on a layer. When there is a selection area, clears the content of the selection area.

(7) Clear outside of selected area

Clears the image drawn outside the selection area.

(8) Fill

Fills in the selected color. When there is a selection area, fills the selection area.

(9) Scale up/down/Rotate

Zooms in/out, rotates, or transforms. When there is a selection area, zooms in/out, rotates or transforms the content of the selection area.

(10) Deselect

Deselects a selection area.

(11) Invert

Inverts a selection area.

(12) Show border of selection

Displays/hides the dotted line indicating a selected area.

(13) Snap to ruler

Configures snap to ruler. When turned on, allows you to draw along a ruler.

(14) Snap to special ruler

Configures snap to special ruler. When turned on, allows you to draw along a special ruler.

(15) Snap to grid

Configures snap to a perspective ruler grid. When turned on, allows you to draw along the grid lines of a perspective ruler.

(16) Show/hide title bar and menu bar

Shows/Hides the [Title bar] and [Menu bar].

(17) Manga Studio 5.0 website

Starts the Web browser to display the "Manga Studio 5.0" Web page.

Palette

The screen for configuring various settings is called a "Palette". Multiple [Palettes] can be accommodated in a [Palette dock]. Settings configurable in each palette are as follows.

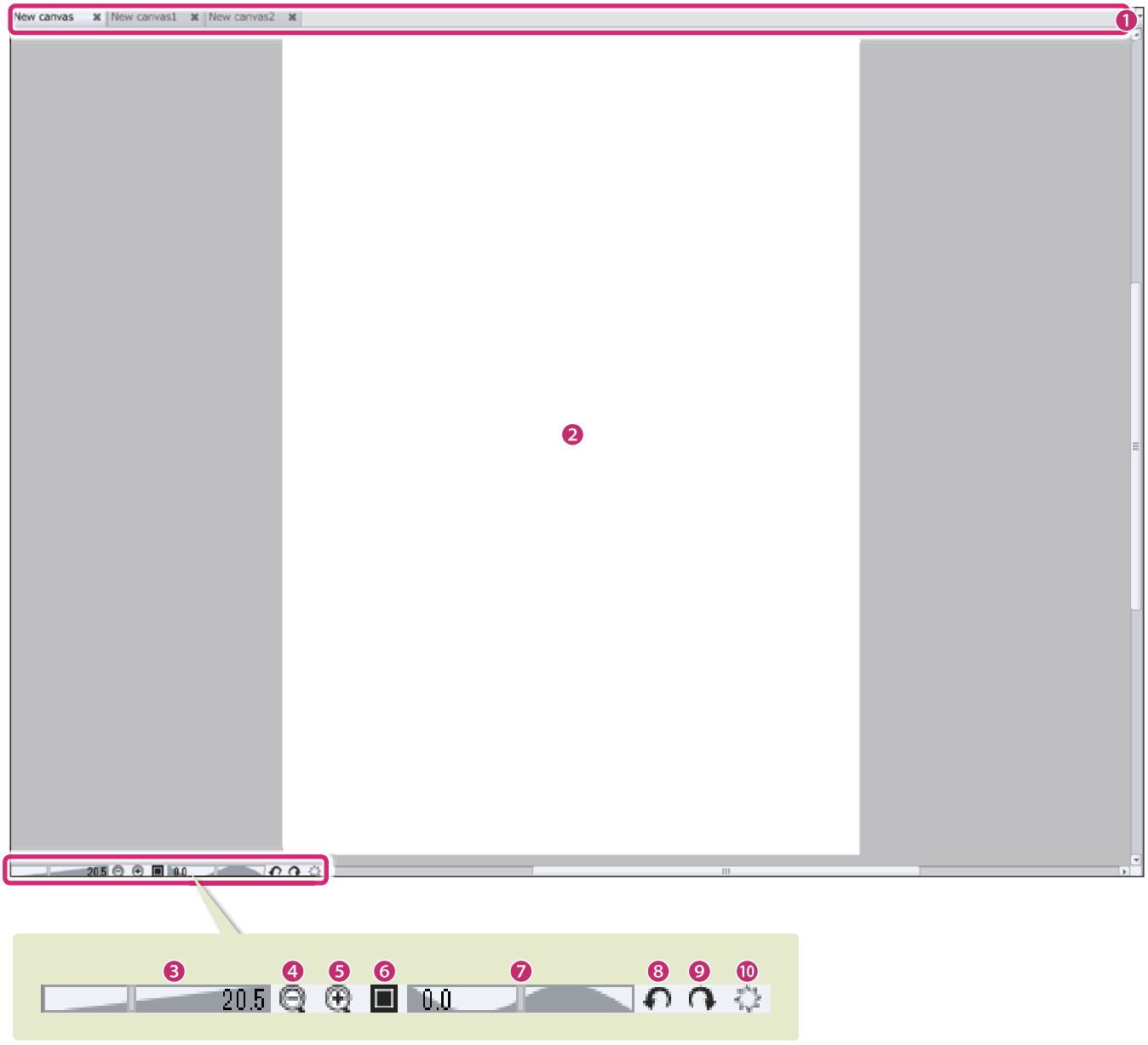
Memo **For details on the operating method of [Palettes] and [Palette dock], see "Palette and Palette Dock Operation" .**

[Tool] palette	Various tools are arranged as buttons. Clicking a button enables the tool for use. For details on the [Tool] palette, see "Tool-type Palette" .
[Sub tool] palette	Each tool comes with preconfigured settings called [Sub tool]. Select a sub tool in accordance with the purpose of the tool to use. For details on the [Sub tool] palette, see "Sub tool Palette" .
[Tool property] palette	Allows you to adjust the settings of the sub tool selected on the [Sub tool] palette. For details on the [Tool property] palette, see "Tool property Palette" .
[Brush size] palette	Allows you to select a tool size from preconfigured values. Furthermore, you can also register in the palette the size of the tool you are using. For details on the [Brush size] palette, see "Brush size Palette" .
[Sub tool detail] palette	Allows you to edit the selected [Sub tool] setting in more detail than the [Tool property] palette. For details on the [Sub tool detail] palette, see "Manga Studio 5.0 Tool Setup Guide".
[Color wheel] palette	Allows you to configure the drawing color by clicking or dragging the [Color wheel]. For details on the [Color wheel] palette, see "Color wheel Palette" .
[Color slider] palette	Allows you to adjust colors using sliders. For details on the [Color slider] palette, see "Color slider Palette" .
[Color set] palette	In addition to selecting a color from a list of typical colors, it allows you to register and manage frequently used colors as a [Color set]. For details on the [Color set] palette, see "Color set Palette" .
[Intermediate color] palette	Allows you to select another color from the reference colors of similar conditions configured in the four corners. For details on the [Intermediate color] palette, see "Intermediate color Palette" .
[Approximate color] palette	Allows you to select another color of similar conditions to the selected drawing color. For details on the [Approximate color] palette, see "Approximate color palette" .
[Layer] palette	Manages layers. Allows you to display layers by freely switching their order, opacity, and the like. For details on the [Layer] palette, see "Layer Palette" .
[Layer property] palette	Allows you to configure settings for a layer. For details on the [Layer property] palette, see "Layer property palette" .
[Search layer] palette	A palette to display layers that match a specified type, for example. For details on the [Search layer] palette, see "Search layer Palette" .
[Navigator] palette	Manages the view of the image displayed on the canvas window. Allows you to check the entire image or display position while working with the image zoomed in. For details on the [Navigator] palette, see "Navigator Palette" .

[Sub view] palette	Allows you to acquire a color from an image displayed as color reference. For details, see "Sub view Palette" .
[History] palette	The [History] palette records and manages operation history. Clicking an operation record on the palette allows you to reverse operations up that point. For details, see "History palette" .
[Auto action] palette	Allows you to register multiple operations on the palette and run these operations in one go. The registered operations can also be run for another canvas. For details, see "Auto action palette" .
[Information] palette	Displays the approximate load Manga Studio 5.0 is placing on your computer in %. For details, see "Information Palette" .
[Material] palettes	Palettes to manage a variety of materials used when drawing illustrations and manga. Materials can be dragged and dropped to the canvas for use. For details on the [Material] palette, see "Material Palettes" .

Canvas Window

The window for editing images is called [Canvas window]. The canvas window consists of the following components.



(1) Canvas switching tab

Displays the file name of the canvas being edited. Clicking the tab allows you to switch the canvas to edit.

Memo

You can change the order in which the [Canvas switching tabs] are displayed. Furthermore, canvases can be displayed on individual windows. For details, see "Canvas Operations" .

(2) Canvas

Area (paper) for drawing illustrations.

(3) Scale up/down slider

Drag the slider to adjust the scale to display the image on the canvas window. Dragging to the right zooms in the thumbnails while dragging to the left zooms out the thumbnails.

(4) Zoom out

Clicking zooms out the image displayed on the canvas window.

(5) Zoom in

Clicking zooms in the image displayed on the canvas window.

(6) Pixel size

When clicked, displays the image displayed on the canvas window in actual pixels (100%).

(7) Rotation slider

Drag the slider to adjust the display angle of the image displayed on the canvas window. Dragging to the right rotates the image to the right (clockwise) while dragging to the left rotates the image to the left (counterclockwise).

(8) Rotate left

Clicking rotates the image displayed on the canvas window to the left by a specified angle.

(9) Rotate right

Clicking rotates the image displayed on the canvas window to the right by a specified angle.

(10) Reset rotate

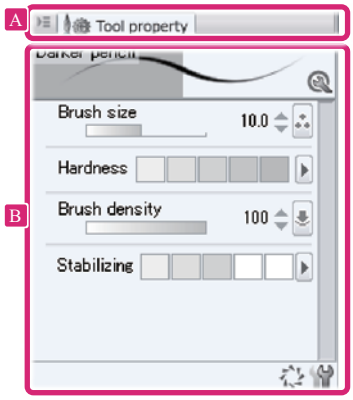
Clicking resets the display angle of the image displayed on the canvas window to the original angle (0 degrees).

Palette and Palette Dock Operation

The section describes the palette and palette dock operating procedures.

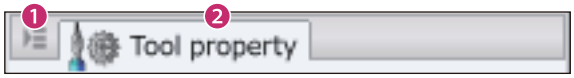
Palette Operation

The following are items common to all palettes.



A. Title Bar

Area where the palette name is displayed. Palettes can be displayed in a different way as well as displayed/hidden.



(1) Palette menu

Displays the setting menu of the relevant palette. For details, see the pages of the relevant palette.

(2) Palette name

Displays the name of the palette.

Memo

Palettes accommodated in the palette dock can be displayed cascaded as if they were tabs. For details, see "Displaying Palettes with Tabs" .

B. Setting Screen

The screen where items that can be configured in the palette are displayed. Items displayed vary depending on the palette.

Palette Dock Operation

The following describes how to move palettes accommodated in palette docks, and how to change their size.

Changing the Height of a Palette within a Palette Dock

To change the height of a palette accommodated in a palette dock, proceed as follows.

1 Select the palette

Place the mouse cursor on the bottom edge of the palette whose height you want to change.

2 Change the palette height

Drag the palette edge either upwards or downwards. In this example, it is dragged upwards.

3 The height change is complete

The bottom edge of the palette is moved up to the dragged position, changing the palette height.

Changing the Palette Dock Width

To change the palette dock width, proceed as follows.

1 Change the palette dock width

Place the mouse cursor at the dock edge on the canvas side, and drag either to the right or left. Dragging in the canvas direction widens the palette dock while dragging in the opposite direction narrows the palette dock.

2 The palette dock width change is complete

The border of the palette dock is moved up to the dragged position, changing the palette dock width.

Minimizing the Palette Dock

Clicking the [Minimize palette dock] icon at the top of the palette dock collapses and minimizes the palette dock.

Clicking the icon again expands the palette dock to its original size.

Moving a Palette within a Palette Dock

To move a palette within the palette dock, proceed as follows.

1 Select the palette

Place the mouse cursor on the title bar of the palette to move.

2 Move the palette

Drag and drop the palette to the desired position. Release the mouse button when a red line displays.

Memo

You can move palettes between the left and right palette docks. For example, dragging a palette on the right side and dropping it on the left side moves it to the left palette dock.

3 The moving of the palette is complete

The palette is moved, changing the order in which in it is displayed.

In this example, the palette is dropped at the top but it can be anywhere.

Displaying Palettes with Tabs

Palettes within a palette dock can be displayed cascaded as if they were tabs. This state is called "tabbed".

1 Select the palette

Place the mouse cursor on the title bar of the palette to be displayed as a tab.

2 Move the palette

Drag and drop the palette inside another palette. When the palettes can be displayed as tabs, the destination palette (the palette where the one moved was dropped) displays in red. Release the mouse button to commit.

3 The grouping into tabs is complete

The palettes at the destination are displayed as tabs. Clicking a tab switches the palettes.

Selecting a tab and then, dragging and dropping it next to another tab allows you to change the order in which they are displayed.

Memo

To display a palette grouped into tabs as an individual palette again, perform "Moving a Palette within a Palette Dock" from step 2 onwards.

Moving Palettes Grouped into Tabs at once

Selecting the empty space on the right side of the tabs will allow you to move the grouped palettes at once. They can be moved anywhere, as with individual palettes.

Displaying Palettes in Individual Windows

Dragging the tab of a palette outside the palette dock displays that palette in an individual window.

Memo

A palette displayed in an individual window can be placed back in the palette dock in the same way as with palettes grouped into tabs.

Moving Palette Docks

Selecting the top of a palette dock allows you to move the entire palette dock. They can be moved anywhere, as with individual palettes.

Important

A palette dock cannot be placed between palettes.

Displaying Palette Docks with Tabs

Dragging and dropping a palette at the top of the palette dock allows you to display the palette docks with tabs.

1 Select the palette

Place the mouse cursor on the title bar of the palette to be display as a tab in the palette dock.

Memo

- **Palettes grouped into tabs can also be displayed as tabs in the palette dock. For details on how to select, see "Moving Palettes Grouped into Tabs at once" .**
- **Other palette docks can also be grouped into tabs in the palette dock. For details on how to select, see "Moving Palette Docks" .**

2 Move the palette

Drag to the top of the palette dock. When the palette can be displayed as a tab, the entire palette dock displays in red. Release the mouse button to commit.

3 The grouping into tabs is complete

The tab is displayed next to the palette dock.

Operating Palette Docks Grouped into Tabs

The following operations are possible with palette docks grouped into tabs.

Switching views with the tabs

Clicking a tab expands in the palette dock the palettes displayed as icons on the tab.

Switching views with a palette icon

Clicking a palette icon on the palette dock tab expands the palette.

Changing the order of tabs

Selecting a tab and then, dragging and dropping it below or above another tab changes the order in which the tabs are displayed.

Displaying/hiding palettes in the palette dock

When a palette dock is grouped into tabs, two [Minimize palette dock] icons are displayed. Clicking the [Minimize palette dock] icon on the upper part of the palette dock hides only the palettes.

Clicking this icon again displays the palettes.

Memo

- **Palettes can also be displayed/hidden by clicking the palette dock tab or palette icon.**
- **Palettes can also be displayed/hidden by clicking the palette icon on the palette dock tab.**

Collapsing the palette dock

When a palette dock is grouped into tabs, two [Minimize palette dock] icons are displayed. Clicking the [Minimize palette dock] icon on the upper part of the tabs minimizes the palette dock.

Clicking this icon again expands the palette dock to its original size.

Fixing a Palette Dock to the Monitor

Dragging the palettes and palette dock up to the right or left edge of the monitor until a red line displays and dropping the palettes and palette dock there fixes the palette dock to the monitor.

Important **In Windows, fixing the palette dock to the monitor is not possible if the main window is maximized.**

A palette dock fixed to the monitor does not move even if the main window is moved.

Memo **The height of a palette dock can be changed by dragging up or down the bottom edge of the palette dock.**

Canvas Operations

This section describes how to change the display order of [Switch canvas] tabs, and how to display a canvas individually.

Changing the Order of Canvas Switching Tabs

Selecting a [Switch canvas] tab and then, dragging and dropping it next to another tab changes the order in which the tabs are displayed.

Displaying Multiple Canvases

Selecting a [Switch canvas] tab and then, dragging and dropping it on the canvas window edge allows you to display multiple canvases simultaneously.

To tile canvases horizontally, drag and drop the [Switch canvas] tab either at the top or bottom of the canvas window.

To tile canvases vertically, drag and drop the [Switch canvas] tab either on the right edge or left edge of the canvas window.

Displaying a Canvas Individually

The following describes the procedure to display a canvas in an individual window as well as to cancel it.

Displaying a Canvas in an Individual Window

Selecting the [Switch canvas] tab and then, dragging and dropping it outside the canvas window displays the canvas in a separate window.

Selecting the [Switch canvas] tab and then, dragging and dropping it on the canvas side also displays the canvas in a separate window.

Canceling an Individual Canvas Window

Selecting the [Switch canvas] tab and then, dragging and dropping it next to another tab cancels the individual window for the canvas.

Selecting the [Switch canvas] tab and then, dragging and dropping it on the canvas side also cancels the individual window for the canvas.

Memo

Dragging the [Switch canvas] tab and dropping it on any of the top, bottom, left and right edges of the canvas window allows you to tile multiple canvases. For details, see "Displaying Multiple Canvases" .

Tool-type Palette

This chapter introduces tool-type palette functions in Manga Studio 5.0.

- Tool Palette
- Sub tool Palette
- Tool property Palette
- Sub tool detail Palette

What Is a Tool-type Palette?

Manga Studio 5.0 comes with the following tool-type palettes.

Tool palette	Various tools are arranged as buttons. Clicking a button enables the tool for use.
Sub tool palette	Each tool comes with preconfigured settings called [Sub tool]. Allows you to select a sub tool for the intended purpose.
Tool property palette	Allows you to adjust the settings of the currently selected sub tool.
Sub tool detail palette	Allows you to adjust the selected [Sub tool] settings in more detail than the [Tool property] palette.

Using the Tool-type Palette

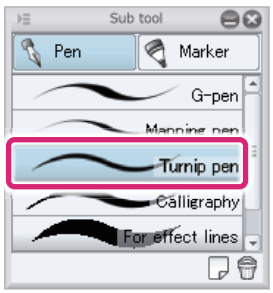
To use a tool-type palette, proceed as follows.

1 Select the tool

On the [Tool] palette, select the tool to use.

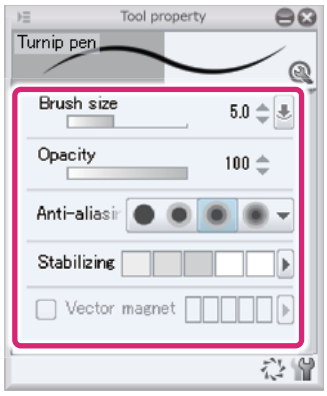
2 Select the sub tool

On the [Sub tool] palette, select the sub tool for the intended purpose.



3 Adjust the sub tool settings

On the [Tool property] palette, adjust the settings of the currently selected sub tool.



4 The tool setup is complete

The tool setup is complete. The tool is now configured for the intended purpose.

Memo

The [Sub tool detail] palette allows you to configure settings in more detail. For details, see "Manga Studio 5.0 Tool Setting Guide".

Functions of the Tool-type Palette

This section describes the functions of the tool-type palettes by palette.

Tool Palette

The [Tool] palette displays when [Window] menu → [Tool] is selected.

Various tools are arranged as buttons. Clicking a button enables the tool for use.

Memo **For details on each tool on the [Tool] palette, see "Tool List" .**

A. Tool Buttons

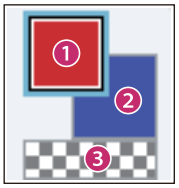
Various tools are arranged as buttons. Clicking a button enables the tool for use.

Note that a tool button is displayed with the icon of the selected sub tool.

B. Color Icon

Displays the currently selected drawing color along with readily available drawing colors.

In the example below, the readily available colors are (in the order of their availability) "red", "blue" and "transparent". "Red", which is displayed with a blue border, is the currently selected drawing color. To change the color, click the relevant color indicator.



(1) Main color

Set the primary (most frequently used) color.

(2) Sub color

Set the next most frequently used color.

This will be the background color when you specify [Create both line and fill] with the [Figure] tool, or you create a balloon.

(3) Transparent color

Select to use transparent color.

Tool Palette Menu

The following describes the functions included in the menu that displays when you click [Palette menu] on the upper left corner of the [Tool] palette.

Tool settings

Displays the [Tool settings] dialog box where you can configure a name for the tool.

Delete tool

Deletes the selected tool and all sub tools included in the tool.

Migrate tool preferences → From IllustStudio [Windows] *

Allows you to add all IllustStudio tools to the [Tool] palette in one go. [Brush shapes] and [Texture] used in the tool are added to the [Material] palette.

[Migrate tool preferences from IllustStudio] Dialog Box

(1) Location of IllustStudio user data folder	Displays the location of the IllustStudio user data folder. If the user data folder has been moved using the IllustStudio preferences, click [Browse] to specify the user data folder on the [Browse folder] dialog box.
(2) Location of IllustStudio execution file	Displays the location of the IllustStudio executable file. If the installation folder of the application has been moved at the time of installing IllustStudio, click [Browse] to specify [IllustStudio.exe] on the [Please select [IllustStudio].] dialog box.
(3) Brush pattern material to import	Settings to import [Brush shape] from IllustStudio. You can select either [All pattern materials] or [Only pattern materials used in the tool]. Selecting [Only pattern materials used in the tool] will exclude [Brush shapes] not used in the IllustStudio tool set.
(4) Tool type to import	Select the tool(s) to import from IllustStudio. To select, check the boxes next to the tool name. You can select multiple tools.

Migrate tool preferences → From Manga Studio 4.0 *

Allows you to add all Manga Studio 4.0 tools to the [Tool] palette in one go. [Brush shapes] used in the tool are added to the [Material] palette.

[Migrate tool preferences from Manga Studio 4.0] Dialog Box

(1) Location of Manga Studio 4 user data folder	Displays the location of the Manga Studio 4.0 user data folder. If the user data folder has been moved using the Manga Studio 4.0 preferences, click [Browse] to specify the user data folder on the [Browse folder] dialog box.
(2)Location of Manga Studio 4 execution file	Displays the location of the Manga Studio 4.0 executable file. If the installation folder of the application has been moved at the time of installing Manga Studio 4.0, click [Browse] to specify either of the files below on the [Please select [Manga Studio 4.0].] dialog box. ● Users of Manga Studio 4.0 EX: CS_EX.exe ● Users of Manga Studio 4.0 Debut : CS_Debut.exe
(3) Tool type to import	Select the tool(s) to import from Manga Studio 4.0. To select, check the boxes next to the tool name. You can select multiple tools.

Show color icon

When turned on, the color icons are displayed on the [Tool] palette.

Show color icon: OFF

Show color icon: ON

Hide tool palette

Hides the [Tool] palette.

Memo **To display the [Tool] palette again, select [Window] menu → [Tool].**

Customizing the Tool Palette

You can change the order in which [Tools] are arranged. Furthermore, you can drag and drop [Sub tools] and [Tool Groups] from the [Sub tool] palette to have them registered in the [Tool] palette.

Changing the Tool Layout

The [Tool] layout on the palette can be changed by dragging the buttons.

Memo **Dragging and dropping to the tool group separator displays separator lines above and below the moved tool.**

Adding a Sub Tool to the Tool Palette

Dragging and dropping [Subtool] between the tool icons on the [Tool] palette [Subtool] is added to the [Tool] palette

Adding a Tool Groop to the Tool Palette

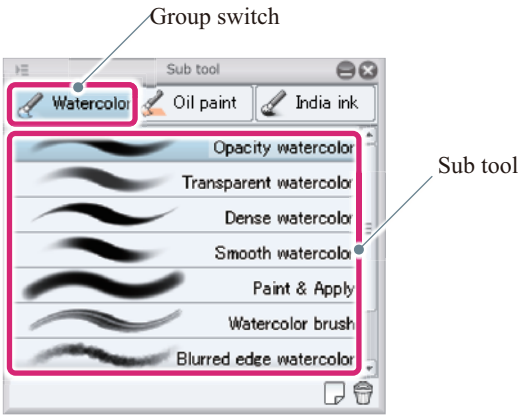
Dragging and dropping a [Tool group] icon between the tool icons on the [Tool] palette [Tool group] is added to the [Tool] palette

Sub tool Palette

The [Sub tool] palette displays when [Window] menu → [Sub tool] is selected.

Each tool comes with preconfigured settings called [Sub tool].

Each button has a sub tool assigned. Click to change the [Tool property] palette settings.
Depending on the palette, you may click [Group switch] to display the sub tools of a different group.



Sub tool Palette Menu

The following describes the functions included in the menu that displays when you click [Palette menu] on the upper left corner of the [Sub tool] palette.

Memo **Some menu items can be run from the context menu that displays when you right click the mouse.**

Settings of sub tool group

Displays the [Settings of sub tool group] dialog box where you can configure a name for the sub tool.

Duplicate sub tool

Displays the [Duplicate sub tool] dialog box to copy the currently selected sub tool.

[Duplicate sub tool] Dialog Box

(1) Name	Input a name for the sub tool.
(2) Output process	Displays the output process of the currently selected sub tool.
(3) Input process	Displays the input process of the currently selected sub tool.
(4) Tool icon	Configure the icon to display on the [Tool] palette when the sub tool is selected.
(5) Background color of icon	Configure the background color for the icon to display on the [Tool] palette when the sub tool is selected. Clicking the color indicator displays the dialog box for selecting a color.

Memo **For details on [Output process] and [Input process], see "Input Process and Output Process of Sub Tools" .**

Settings of sub tool

Displays the [Settings of sub tool] dialog box where you can edit the name of the currently selected sub tool.

[Settings of sub tool] Dialog Box

(1) Name	Input a name for the sub tool.
(2) Output process	Displays the output process of the currently selected sub tool.
(3) Input process	Displays the input process of the currently selected sub tool.
(4) Tool icon	Configure the icon to display on the [Tool] palette when the sub tool is selected.
(5) Background color of icon	Configure the background color for the icon to display on the [Tool] palette when the sub tool is selected. Clicking the color indicator displays the dialog box for selecting a color.

Memo **For details on [Output process] and [Input process], see "Input Process and Output Process of Sub Tools" .**

Delete sub tool

Deletes the currently selected sub tool.

Create custom sub tool

Displays the [Create custom sub tool] dialog box to add the current settings on the [Tool property] palette as a new sub tool.

[Create custom sub tool] Dialog Box

(1) Name	Input a name for the sub tool.
(2) Output process	Configure an output process for the sub tool.
(3) Input process	Configure an input process for the sub tool.
(4) Tool icon	Configure the icon to display on the [Tool] palette when the sub tool is selected.
(5) Background color of icon	Configure the background color for the icon to display on the [Tool] palette when the sub tool is selected. Clicking the color indicator displays the dialog box for selecting a color.

Memo **For details on [Output process] and [Input process], see "Input Process and Output Process of Sub Tools" .**

Lock

Saves the values configured on the [Tool property] palette to the currently selected sub tool. When locked, the settings on the [Tool property] palette can be changed but when the same sub tool is selected again, the settings are restored to those at the time of [Lock].

Memo **Locked sub tools are displayed on the [Sub tool] palette with a [Lock] icon.**

Revert to initial settings

Resets the settings on the [Sub tool] palette and restores the selected sub tool settings to their initial values.

Register to initial settings

Registers the settings on the [Sub tool] palette as the initial settings for the selected sub tool.

Modifier key settings

Opens the [Modifier key settings] dialog box where you can configure modifier keys for the selected sub tool.

Memo

For details on the [Modifier key settings] dialog box, see "Modifier key settings [Windows]" .

Import sub tool

Imports a sub tool file (extension: sut) to be registered in the [Sub tool] palette. Windows users can also import IllustStudio and Manga Studio 4.0 tool sets (extension: tos).

Memo

Sub tool files (extension: sut) and IllustStudio and Manga Studio 4.0 tool sets (extension: tos) can also be imported to the [Sub tool] palette using drag and drop.

Export sub tool

Exports (saves) the selected [Sub tool] to a sub tool file (extension: sut).

Register sub tool as material

Displays the [Material property] dialog box to register the selected sub tool in a [Material] palette.

Memo

A sub tool can also be registered as material by dragging and dropping the selected sub tool to a [Material list] on the [Material] palette. When registered in this way, the [Material property] dialog box does not display.

[Material property] Dialog Box

(1) Material name

Input a name for the material.

(2) Location to save material

Click a folder to specify the location to save the material. The specified location is reflected in the [Tree view] of the [Material] palette.

(3) Search tag

Click the tag list to specify the search tag to be displayed on the [Tag list].

Clicking the tag with a + sign in the lower right will allow you to create a new tag.

How to show

Configure how to display each sub tool button.

Stroke

Displays sub tool buttons as strokes. Strokes can be used only for drawing tools such as pen and brush. For others, text is displayed.

Tile/Tile small

Displays sub tool buttons as tiles. Tiles come in two sizes.

Text

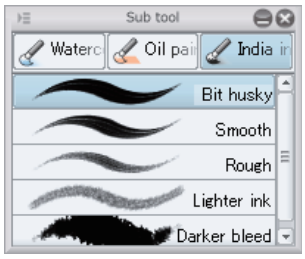
Displays the sub tool buttons using text.

Show sub tool group name

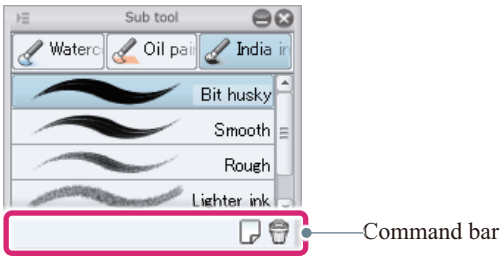
When turned on, displays the sub tool group name next to the [Switch group] icon.

Display command bar

When turned on, the command bar is displayed on the [Sub tool] palette.



Show command bar: OFF



Show command bar: ON

Hide sub tool palette

Hides the [Sub tool] palette.

Memo **To display the [Sub tool] palette again, select [Window] menu → [Sub tool].**

Input Process and Output Process of Sub Tools

The following describes what sub tool input process and output process are.

In Manga Studio 5.0, a sub tool operation is defined as a combination of an [Input process] and [Output process].

Input process	Indicates how to specify the tool.
Output process	Indicates the target to be created or processed.

For example, for [Lasso] and [Selection pen], the [Input process] and [Output process] are configured as follows:

Tool name	Input process	Output process
Lasso selection	Lasso	Selection area
Selection pen	Brush	Selection area

In the examples above, how the tools are specified (input process) are different but the operation "Create selection" (output process) is common to both.

Customizing the Sub Tool Palette

You can change the order in which [Sub tools] are arranged. Furthermore, you can also manage [Sub tools] by tool group, by creating new tool groups, changing their display order, and so on.

Changing the Sub Tool Layout

The [Sub tool] layout on the palette can be changed by dragging the buttons.

Changing the Tool Group Layout

The tool group layout on the palette can be changed by dragging the buttons.

Creating a Tool Group

To create a tool group, drag and drop a [Sub tool] to the empty space next to the tool group icons. A new tool group is created.

Memo

Dragging and dropping a button to the space between two tool group icons is also possible.

Moving to Another Tool Group

Dragging and dropping a [Sub tool] to the icon of another tool group moves the [Sub tool] to that tool group.

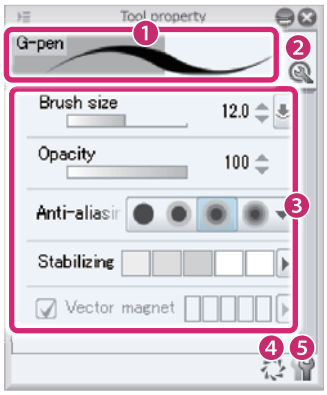
Moving a Tool Group to Another Tool

Dragging and dropping a [Tool group] icon to another tool icon on the [Tool] palette moves the [Tool group] to that tool.

Tool property Palette

The [Tool property] palette displays when [Window] menu → [Tool property] is selected.

The [Tool property] palette adjusts the settings of the selected sub tool.



Memo **The display of items whose values are configured with a slider can be changed to an indicator. For details on how to change, see "Right-click menu" .**

(1) Stroke preview

Previews the stroke of the selected sub tool.

(2) Lock

Saves the values configured on the [Tool property] palette to the currently selected sub tool. When locked, the settings on the [Tool property] palette can be changed but when the same sub tool is selected again, the settings are restored to those at the time of [Lock].

Memo **Locked sub tools are displayed on the [Sub tool] palette with a [Lock] icon.**

(3) Tool property

Allows you to adjust the settings of the sub tool selected on the [Sub tool] palette.

Memo **Items available on the [Tool property] vary depending on the selected sub tool. For tool specific items, see "Tool List" .**

(4) Initial settings

Resets the settings on the [Tool property] palette and restores the selected sub tool settings to their initial values.

(5) Sub tool detail

When turned on, displays the [Sub tool detail] palette. When turned off, closes the [Sub tool detail] palette.

Memo **The [Sub tool detail] palette allows you to edit the selected sub tool setting in more detail than the [Tool property] palette. For details, see "Manga Studio 5.0 Tool Setting Guide".**

Tool property Palette Menu

The following describes the functions included in the menu that displays when you click [Palette menu] on the upper left corner of the [Tool property] palette.

Lock

Saves the values configured on the [Tool property] palette to the currently selected sub tool. When locked, the settings on the [Tool property] palette can be changed but when the same sub tool is selected again, the settings are restored to those at the time of [Lock].

Revert to initial settings

Resets the settings on the [Tool property] palette and restores the selected sub tool settings to their initial values.

Register to initial settings

Registers the settings on the [Tool property] palette as the initial settings of the selected sub tool.

Modifier Key Settings

Opens the [Modifier key settings] dialog box where you can configure modifier keys for the selected sub tool.

Memo **For details on the [Modifier key settings] dialog box, see "Modifier key settings [Windows]" .**

Show Category

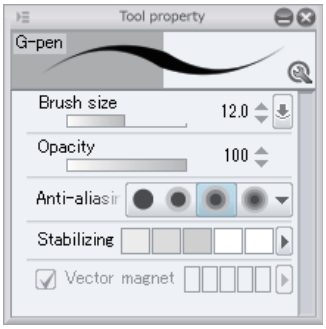
When turned on, displays category separators of the [Sub tool detail] palette on the [Tool property] palette.

Show stroke preview

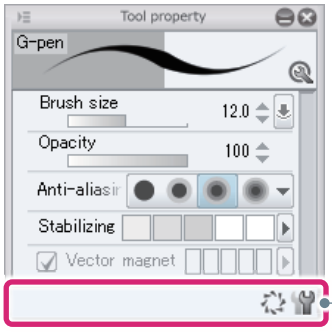
When turned on, displays [Stroke preview].

Show command bar

When turned on, displays the command bar of the [Tool property] palette.



Show command bar: OFF



Show command bar: ON

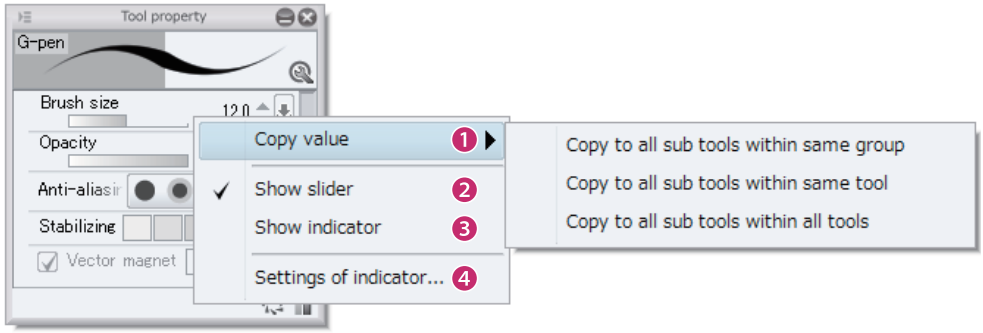
Hide tool property palette

Hides the [Tool property] palette.

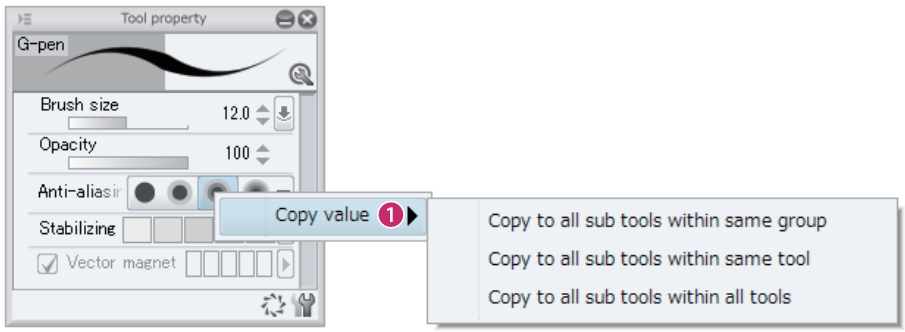
Memo **To display the [Tool property] palette again, select [Window] menu → [Tool property].**

Right-click menu

The following describes how to configure the palettes using the menu that displays when an item on the palette is right-clicked.



Right-clicking over the slider/indicator



Right-clicking over any item other than the slider/indicator

(1) Copy a value

Copies the setting values of an item to other sub tools. You can select one of the following copy destinations:

- All sub tools within the same group
- All sub tools within the same tool
- All sub tools within all tools

(2) Show slider

Switches the indicator display to slider display.

Memo

[Show slider] displays when you right-click over a slider/indicator.

(3) Settings of Indicator

Switches the slider display to indicator display.

Memo

- **[Settings of Indicator] displays when you right-click over a slider/indicator.**
- **The configured value is not displayed for indicator display. To view the currently configured value, click the triangular icon on the right side of the indicator.**

(4) Indicator settings

Selecting the menu item displays the [Indicator settings] dialog box. On the dialog box, you can register a value to each indicator bar.

Memo **[Indicator settings] displays when you right-click over a slider/indicator.**

(1) Input a value in the input field of each indicator bar. Clicking the triangular icon on the right side of the input field allows you to configure the value with a slider.

(2) Clicking [OK] registers the input values.

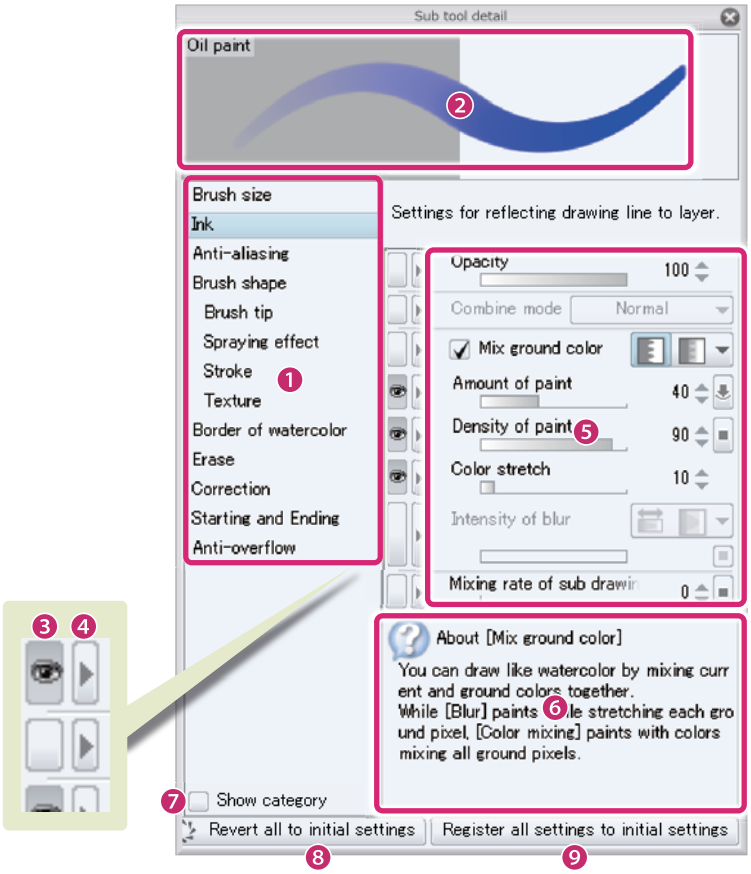
Important **When configuring values with the [Indicator settings] dialog box, be sure the values are decreasing to the left and increasing to the right.**

Sub tool detail Palette

The [Sub tool detail] palette displays when [Window] menu → [Sub tool detail] is selected.

The [Sub tool detail] palette allows you to edit the selected sub tool settings in more detail than the [Tool property] palette.

Memo **The [Sub tool detail] palette also displays when [Sub tool detail] on the [Tool property] palette is clicked.**



(1) Category

Select the category of the item to configure.

(2) Stroke preview

Previews the stroke of the sub tool being configured.

(3) Show in tool property

Configure items to be displayed on the [Tool property] palette. Turned on items can also be adjusted from the [Tool property] palette when the sub tool with configured settings is selected.

(4) Copy a value/Copy display status

Clicking the button displays a menu that allows you to copy the setting values or showing status to other sub tools.

Copy value

Copies the setting values of the item to other sub tools. You can select one of the following copy destinations:

- All sub tools within the same group
- All sub tools within the same tool
- All sub tools within all tools

Copy showing status

Copies the showing status of the item to other sub tools. You can select one of the following copy destinations:

- All sub tools within the same group
- All sub tools within the same tool
- All sub tools within all tools

Settings of Indicator

Switches the slider display to indicator display.

Memo **The configured value is not displayed for indicator display. To view the currently configured value, click the triangular icon on the right side of the indicator.**

Show slider

Switches the indicator display to slider display.

Indicator settings

Selecting the menu item displays the [Indicator settings] dialog box. On the dialog box, you can register a value to each indicator bar.

(1) Input a value in the input field of each indicator bar. Clicking the triangular icon on the right side of the input field allows you to configure the value with a slider.

(2) Clicking [OK] registers the input values.

Important **When configuring values with the [Indicator settings] dialog box, be sure the values are decreasing to the left and increasing to the right.**

(5) Sub tool settings

Configure the sub tool settings in detail.

Memo **Items that can be configured vary depending on the selected tool and sub tool. For details on the items, see "Manga Studio 5.0 Tool Setting Guide".**

(6) Information area

Displays setting tips, preview of the settings and the like.

Memo **Depending on the selected category, the palette height may need to be increased for settings preview to display.**

(7) Show Category

When turned on, displays category separators on the [Tool property] palette.

(8) Revert all to initial settings

Restores the settings of the selected sub tool to their initial values.

(9) Register all settings to initial settings

Registers the settings for the selected sub tool as its initial settings.

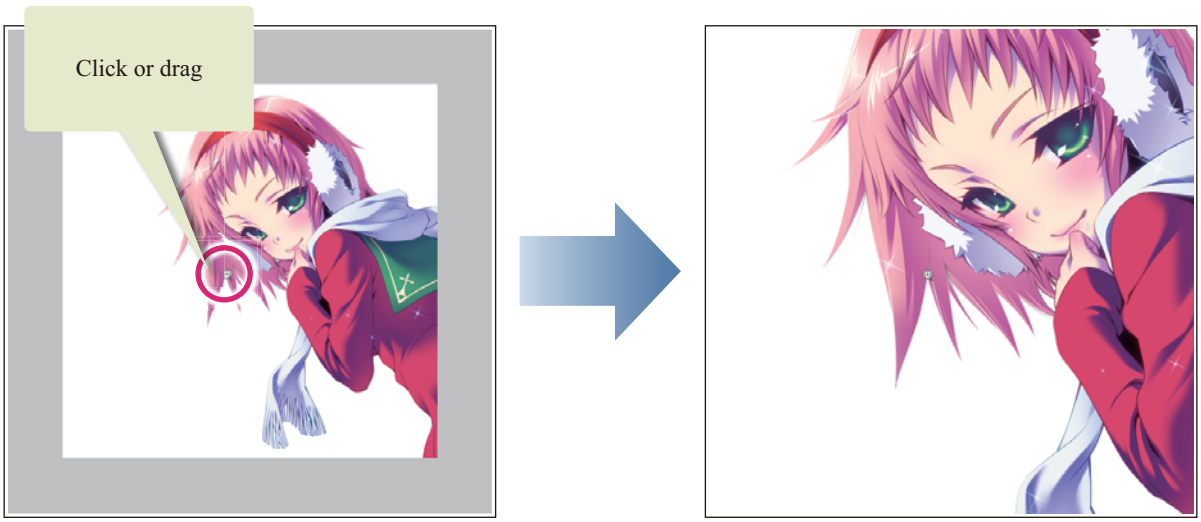
Tool List

This chapter introduces the functions in the [Tool] palette by tool.

Zoom Tool

The magnifier tool allows you to zoom in or out the screen view.

To zoom in or out, click or drag on the canvas.



The [Zoom] tool comes with preconfigured settings called [Sub tool].
You can change the sub tool by clicking the buttons on the [Sub tool] palette.
Furthermore, using the [Tool property] palette, you can configure detailed settings for the selected sub tool.

Memo

Settings available on the [Tool property] vary depending on the selected sub tool. For details on the settings, see "Manga Studio 5.0 Tool Setting Guide".

Move Tool

The [Move] tool allows you to scroll as well as rotate the screen view.

The [Move] tool comes with preconfigured settings called [Sub tool]. You can change the sub tool by clicking the buttons on the [Sub tool] palette.
Furthermore, using the [Tool property] palette, you can configure detailed settings for the selected sub tool.

Memo

Settings available on the [Tool property] vary depending on the selected sub tool. For details on the settings, see "Manga Studio 5.0 Tool Setting Guide".

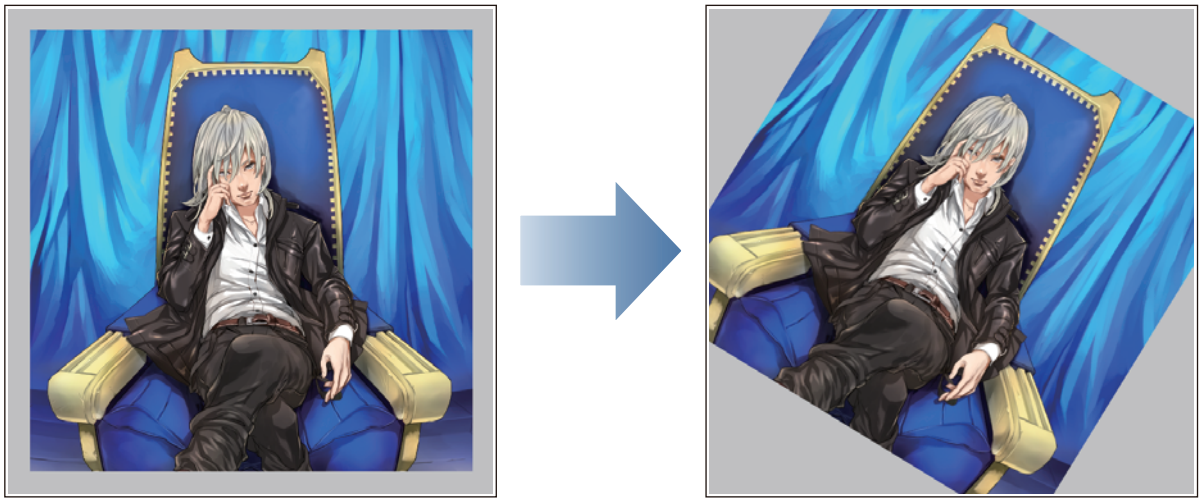
Example of Sub Tool: Hand

Selecting [Hand] on the [Sub tool] palette allows you to scroll the screen view. To scroll, drag on the canvas.

Example of sub tool: Palm

Example of Sub Tool: Rotate

Selecting [Rotate] on the [Sub tool] palette allows you to rotate the screen view. To rotate, drag on the canvas.



Example of sub tool: Rotation

Operation Tool

The [Operation] tool allows you to transform/rotate image materials/frame borders, select layers, operate 3D materials and rulers, and so on.

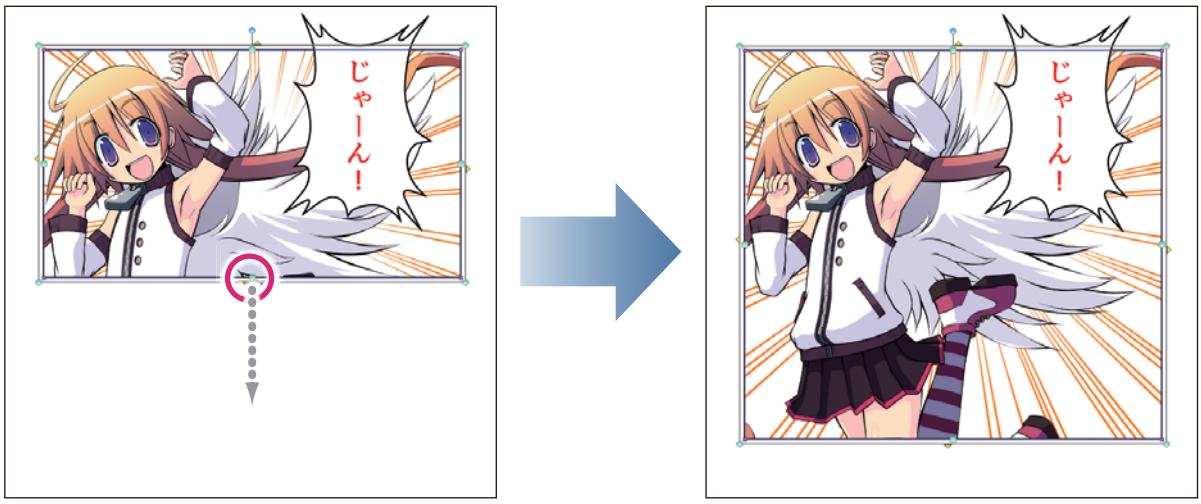
The [Operation] tool comes with preconfigured settings called [Sub tool].
You can change the sub tool by clicking the buttons on the [Sub tool] palette.
Furthermore, using the [Tool property] palette, you can configure detailed settings for the selected sub tool.

Memo

Settings available on the [Tool property] vary depending on the selected sub tool. For details on the settings, see "Manga Studio 5.0 Tool Setting Guide".

Example of Sub Tool: Object

Selecting [Object] on the [Sub tool] palette allows you to move, transform and rotate frame borders, imported images and the like.



Example of sub tool: Object

Allows you to move, transform and rotate frame borders, imported images and the like.

Memo

Right clicking the canvas when the [Object] sub tool is selected displays a menu. The displayed menu items vary depending on the content of the edited layer.

Example of Sub Tool: Layer selection

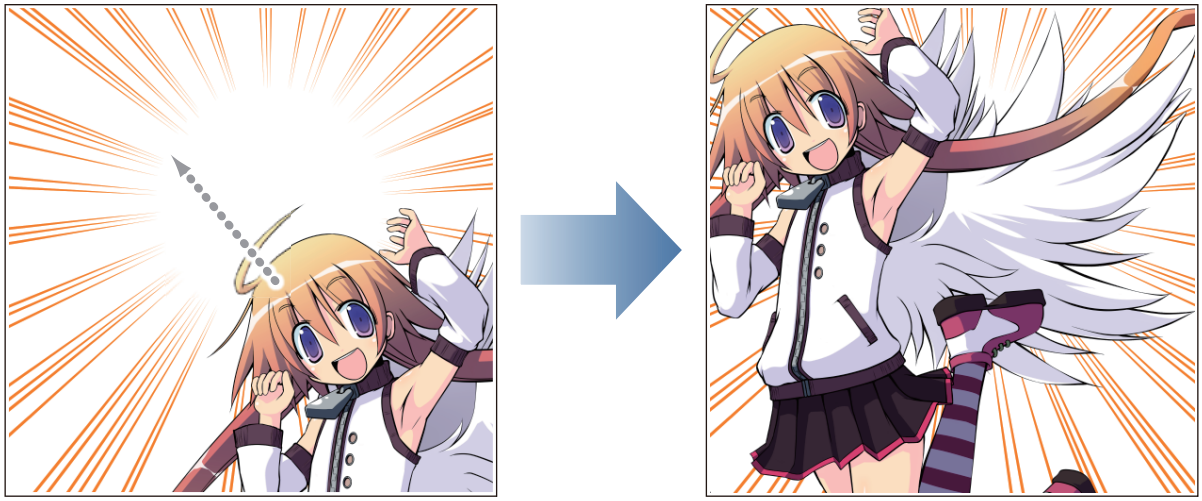
Selecting [Layer selection] on the [Sub tool] palette allows you to select a particular layer from an image composed of multiple layers.

- Clicking on the canvas selects the layer if it includes a drawn area. When multiple layers are stacked, the topmost layer with a drawn area is selected.
- Specifying a selection by dragging the tool on the canvas selects a layer including a drawn area within the selected area.

Move layer Tool

The [Move layer] tool allows you to move only a specific layer image.

Dragging on the canvas, moves the selected layer.



The [Move layer] tool comes with preconfigured settings called [Sub tool].
You can change the sub tool by clicking the buttons on the [Sub tool] palette.
Furthermore, using the [Tool property] palette, you can configure detailed settings for the selected sub tool.

Memo

Settings available on the [Tool property] vary depending on the selected sub tool. For details on the settings, see "Manga Studio 5.0 Tool Setting Guide".

Marquee tool

The [Marquee] tool is a tool that allows you to create all kinds of selections depending on a shape or drawing.

**The [Marquee] tool comes with preconfigured settings called [Sub tool].
You can change the sub tool by clicking the buttons on the [Sub tool] palette.
Furthermore, using the [Tool property] palette, you can configure detailed settings for the selected sub tool.**

Memo

- **Settings available on the [Tool property] vary depending on the selected sub tool. For details on the settings, see "Manga Studio 5.0 Tool Setting Guide".**
- **Creating a selection displays a [Selection launcher] below the selected area. For details, see "Selection Launcher" .**

Example of Sub Tool: Rectangle/Ellipse

Selecting [Rectangle]/[Ellipse] on the [Sub tool] palette allows you to create a rectangular/elliptical selection.

Memo

Dragging while holding down the [Shift] key will allow you to create circular or square selection.

Example of sub tool: Rectangle selection

Allows you to create a rectangular or circular selection area.

Example of Sub Tool: Lasso

Selecting [Lasso] on the [Sub tool] palette allows you to create a selection of any shape.

Example of sub tool: Lasso selsction

Allows you to create a selection area of any shape.

Example of Sub Tool: Polyline

Selecting [Polyline] on the [Sub tool] palette allows you to create a selection composed of straight line segments.

Example of sub tool: Polyline selection

Allows you to create a selection area composed of straight line segments.

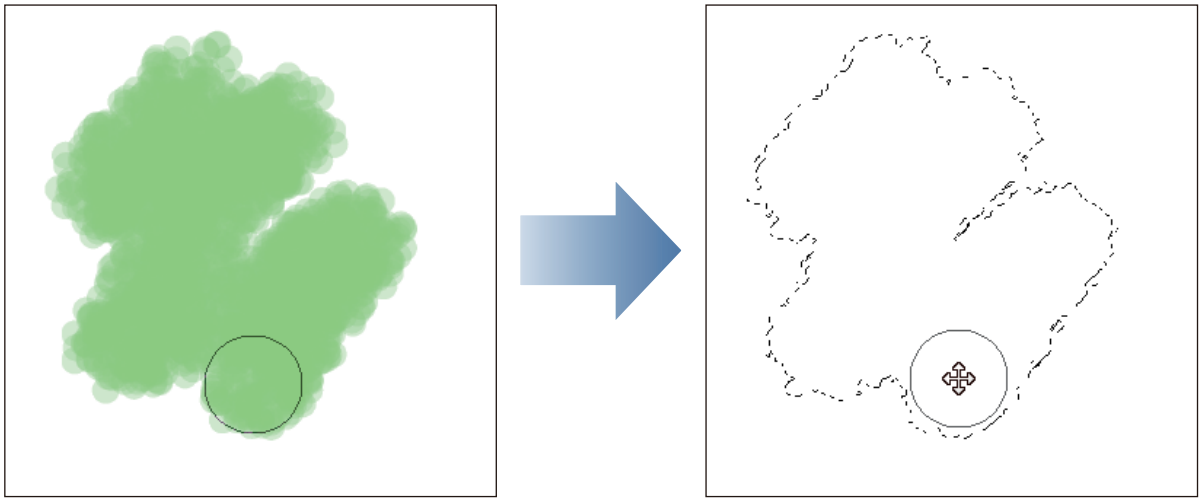
Memo

- **To close a selection area, double click or click the starting point.**
- **To cancel all the specified points, press [Esc].**
- **To cancel the point specified last, press [Delete].**

Example of Sub Tool: Selection pen/Clear selection

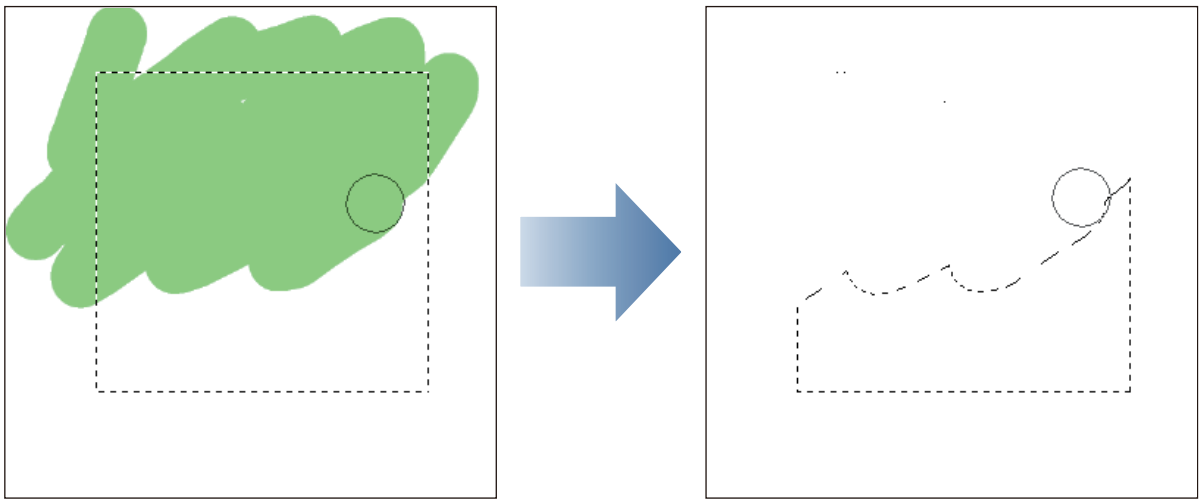
Selecting [Selection pen] or [Selection erase] on the [Sub tool] palette allows you to create a selection as drawn.

Selection pen	Dragging on the canvas creates a selection in the dragged area.
Selection erase	Dragging on the canvas deletes the dragged area from the selection.



Example of sub tool: Selection pen

Dragging on the canvas creates a selection area in the dragged area.

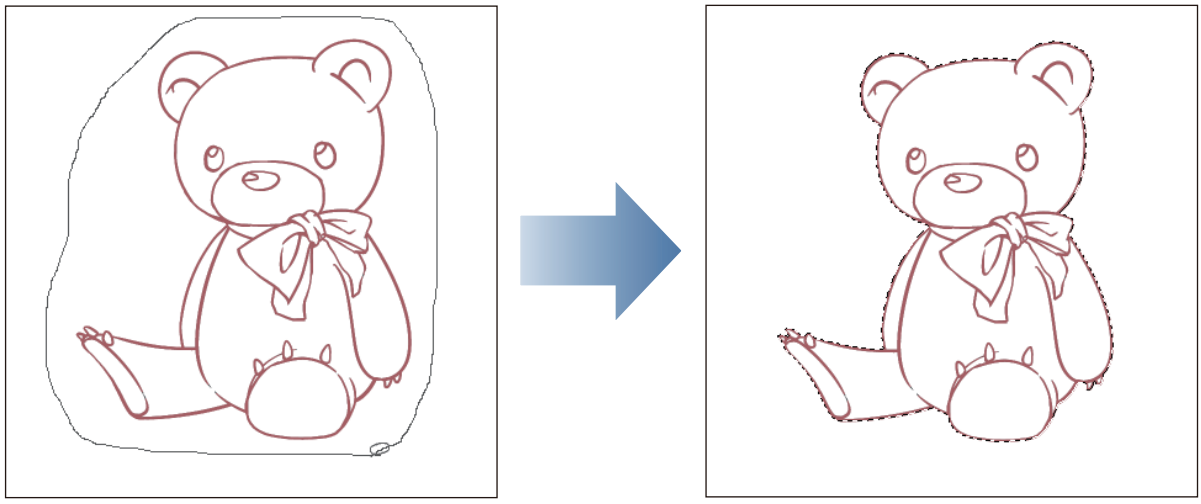


Example of sub tool: Clear selection

Dragging on a selection area deletes the dragged area from the selection.

Shrink selection

Allows you to create a selection matching the outline of a drawing completely included in the area drawn by dragging the marquee tool.



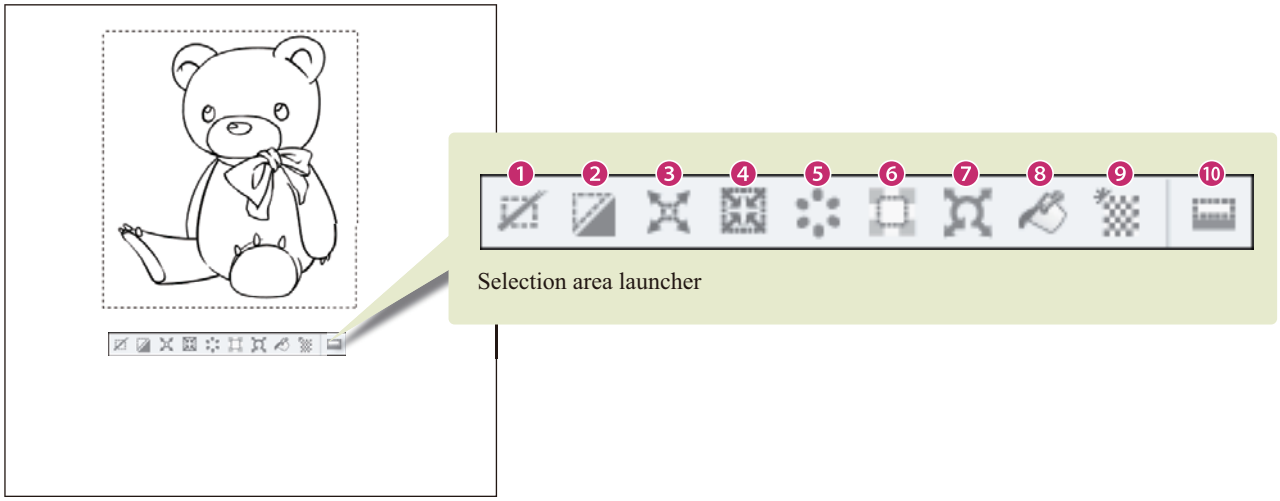
Example of sub tool: Shrink selection

Dragging around an object creates a selection area along the drawing.

Selection Launcher

Creating a selection displays a [Selection launcher] below the selected area.

From the [Selection launcher], you can perform various operations related to the selection.



(1) Deselect

Deselects a selected area.

(2) Invert

The area outside the selected area becomes the selection area.

(3) Expand selection

Expands the selected area. For details, see "Expand Selected area" .

(4) Shrink selection

Reduces the selected area. For details, see "Shrink Selected area" .

(5) Clear

Clears drawings inside a selected area.

(6) Clear outside of selected area

Clears drawings outside a selected area.

(7) Scale up/Scale down/Rotate

Moves or transforms the content inside a selected area. For details on scale up/scale down/rotate, see "Transform" .

(8) Fill

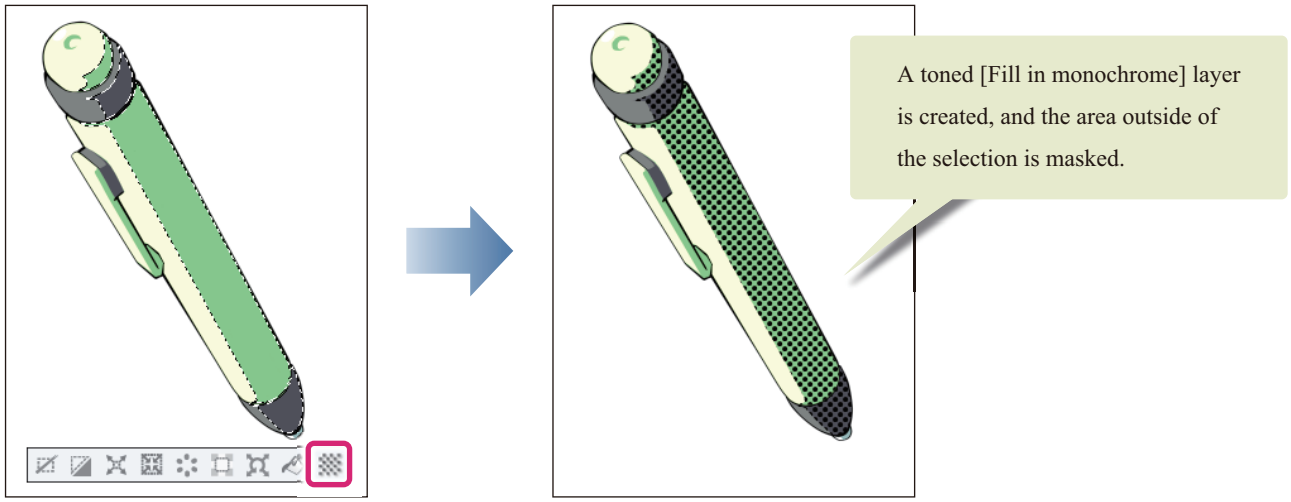
Fills a selected area with the drawing color.

(9) New tone

Creates a new toned [Fill in monochrome] layer. In the created layer, the area outside of the selected area is masked.

Memo

The [Simple tone settings] dialog box opens while you are creating the layer. On the dialog box, you can configure settings related to the number of lines and halftone dots. For details, see "Tone" .



(10) Selection launcher settings

Clicking the menu item displays the [Selection launcher settings] dialog box. The dialog box allows you to add/delete command icons to/from the [Selection launcher], change the display position or image of an icon, arrange icons hierarchically, and so on. For details, see "Configuring the Selection Launcher Settings" .

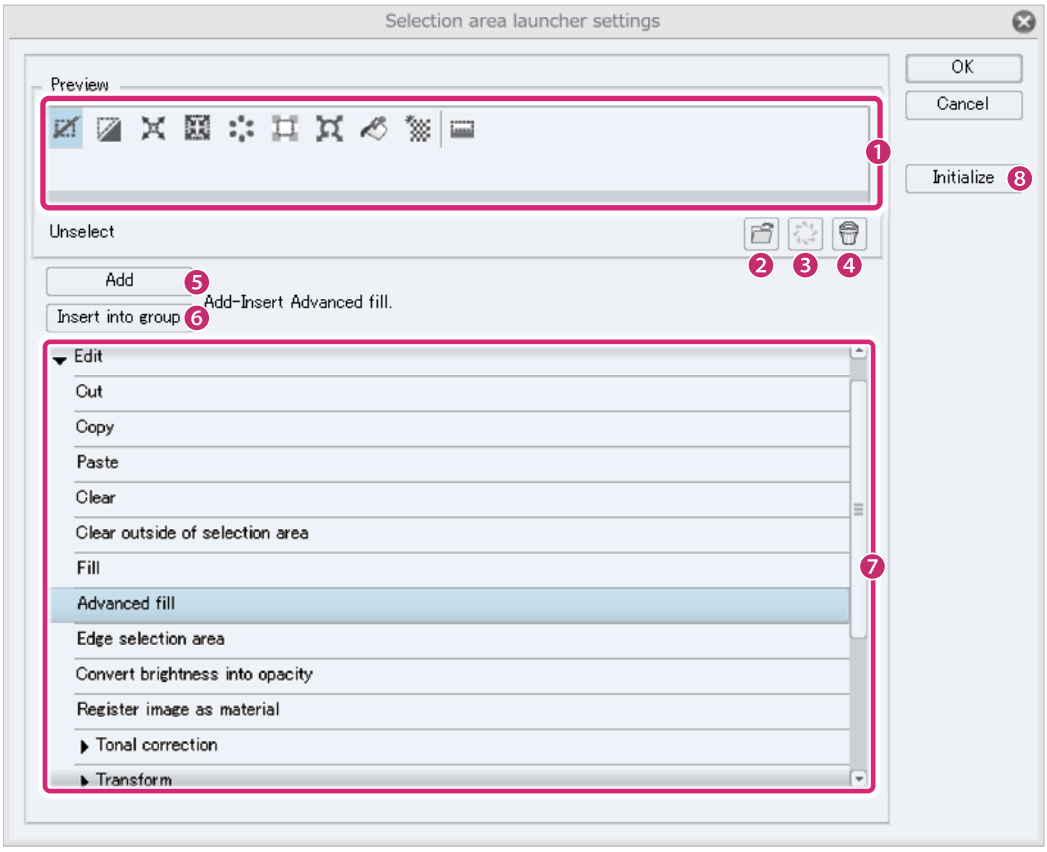
Memo

The [Selection launcher settings] dialog box can also be displayed from [View] menu → [Selection launcher settings].

Configuring the Selection Launcher Settings

This section describes the names and functions of each part of the [Selection launcher settings] dialog box and how to edit the icons on the [Selection launcher].

[Selection launcher settings] Dialog Box



(1) Preview

Previews the [Selection launcher] being configured.

(2) Import file

Imports the image file to use as image for an icon. Clicking the button displays a dialog box to select the image file for the icon. The image may be one created by yourself.

Memo **Acceptable icon image file formats are: BMP, JPEG, PNG, TIFF and Targa.**

(3) Reset

Allows you to reset the icon settings.

(4) Delete

Deletes the command icon selected on the [Preview].

(5) Add

Adds a command icon to the [Preview].

(6) Insert into group

Arranges commands hierarchically and adds them to the command icon position selected in the [Preview}.

A ▼ displays on the right side of hierarchically arranged commends. Clicking the icon of a hierarchically arranged command displays the icon list of commands under it.

(7) Command list

Select the icon to add to the [Selection launcher].

(8) Reset

Initializes the [Selection launcher] settings.

Adding a Command

To add a command to the [Selection launcher], proceed as follows.

1 Select the command

Click [Selection launcher settings] on the [Selection launcher]. The [Selection launcher settings] dialog box opens.

Memo

The [Selection launcher settings] dialog box can also be displayed from [View] menu → [Selection launcher settings].

2 Decide the position where you want to add the command

In [Preview], click the icon in the position where you want to add the command.

Memo

The command icon will be added next to the clicked position.

3 Select the command to add

Select the command to add from the [Command list].

4 Add the icon to the preview

Click [Add]. The selected command icon is added to [Preview].

Memo

The command icon can also be added by double clicking the menu item.

To change the position of a command icon in [Preview], drag and drop next to another icon.

Memo

To add or delete separator lines, or arrange the icons hierarchically, perform as follows:

- **To add a separator line, click between command icons.**
- **To delete a separator line, click the separator line.**
- **To arrange a command icon in the [Preview] hierarchically, drag and drop onto another icon.**

5 The icon is added to the Selection launcher

Clicking [OK] closes the [Selection launcher settings] dialog box. The icon is now added to the [Selection launcher].

Deleting a Command

To delete an icon from the [Selection launcher], proceed as follows.

1 Select the command

Click [Selection launcher settings] on the [Selection launcher]. The [Selection launcher settings] dialog box opens.

Memo

The [Selection launcher settings] dialog box can also be displayed from [View] menu → [Selection launcher settings].

2 Select the command to delete

In [Preview], select the command icon you want to delete.

3 Delete the icon from the preview

Clicking [Delete] displays a confirmation dialog box. Clicking [Delete] on the dialog box deletes the selected command icon from [Preview].

Memo

A command icon can also be deleted by dragging and dropping onto [Delete].

4 The icon is deleted from the Selection launcher

Clicking [OK] closes the [Selection launcher settings] dialog box. The icon is now deleted from the [Selection launcher].

Arranging Commands Hierarchically

To arrange the icons on the [Selection launcher] hierarchically, proceed as follows.

1 Select the command

Click [Selection launcher settings] on the [Selection launcher].

Memo

The [Selection launcher settings] dialog box can also be displayed from [View] menu → [Selection launcher settings].

2 Decide the position where you want to arrange the commands hierarchically

In [Preview], click the icon in the position where you want to arrange the commands hierarchically.

3 Select the command to add

Select the command to add from the [Command list].

4 Arrange icons in the preview hierarchically

Click [Insert into group]. The command icons in [Preview] are arranged hierarchically.

Memo

- **A command icon in the [Preview] can also be arranged hierarchically by dragging and dropping onto another icon.**
- **When command icons are arranged hierarchically, ▼ displays next to the icon.**

5 Reorder the icons

The order in which commands are arranged hierarchically can be changed by displaying them as a list.

(1) Click the icon of the hierarchically arranged commands. The icons of the commands arranged hierarchically display as a list.

(2) Drag and drop the icon of the command whose position you want to change.

6 The icons on the Selection launcher are arranged hierarchically

Clicking [OK] closes the [Selection launcher settings] dialog box. The icons on the [Selection launcher] are arranged hierarchically.

Changing the Icon of a Command

To change the icon of a command, proceed as follows.

1 Select the command

Click [Selection launcher settings] on the [Selection launcher].

Memo **The [Selection launcher settings] dialog box can also be displayed from [View] menu → [Selection launcher settings].**

2 Select the command icon

In [Preview], click the command icon you want to change.

3 Select the image file

Specify the image to use as icon.

(1) Click [Import file].

(2) The dialog box for selecting a file displays. Specify the file of the image you want to use as icon.

Memo **Acceptable icon image file formats are: BMP, JPEG, PNG, TIFF and Targa.**

4 The icon change is complete

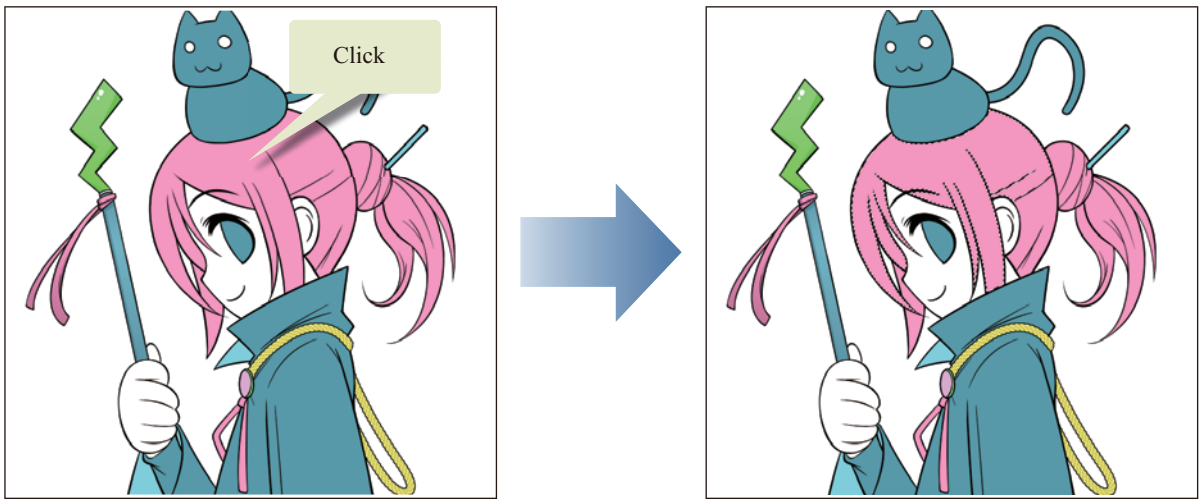
Click [OK] on the [Selection launcher settings] dialog box.

The dialog box closes and the icon change on the [Selection launcher] is complete.

Memo **The icons on the [Command bar] and [Selection launcher] are common. Changing the icon of a command on the [Command bar] with the [Selection launcher settings] dialog box also changes the icon on the [Command bar].**

Magic Wand Tool

The [Magic Wand] tool allows you to create a selection area from continuous areas of the same color.



Example of use: Auto select tool

The [Magic Wand] tool comes with preconfigured settings called [Sub tool].
You can change the sub tool by clicking the buttons on the [Sub tool] palette.
Furthermore, using the [Tool property] palette, you can configure detailed settings for the selected sub tool.

Memo

- **Settings available on the [Tool property] vary depending on the selected sub tool. For details on the settings, see "Manga Studio 5.0 Tool Setting Guide".**
- **To cancel an auto selection process that may take long, press the [Esc] key.**

Eye dropper Tool

The [Eye dropper] tool allows you to acquire colors from an image.

Clicking on the canvas acquires a color and reflects it in the [Color] palette.

Example of use: Eye dropper

The [Eye dropper] tool comes with preconfigured settings called [Sub tool].
You can change the sub tool by clicking the buttons on the [Sub tool] palette.
Furthermore, using the [Tool property] palette, you can configure detailed settings for the selected sub tool.

Memo

Settings available on the [Tool property] vary depending on the selected sub tool. For details on the settings, see "Manga Studio 5.0 Tool Setting Guide".

Pen Tool

The [Pen] tool allows you to draw lines of different thicknesses as with dip pens, or of uniform thickness as with felt-tip pens.

Example of drawing: [Pen] tool
Allows you to draw lines of different thicknesses as with dip pens, or of unifor thickness as with felt-tip pens.

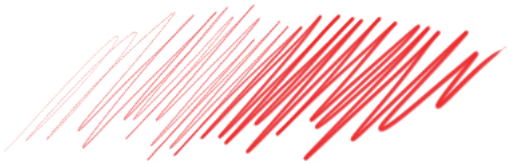
The [Pen] tool comes with preconfigured settings called [Sub tool].
You can change the sub tool by clicking the buttons on the [Sub tool] palette.
Furthermore, using the [Tool property] palette, you can configure detailed settings for the selected sub tool.

Memo

Settings available on the [Tool property] vary depending on the selected sub tool. For details on the settings, see "Manga Studio 5.0 Tool Setting Guide".

Pencil Tool

The [Pencil] tool allows you to draw with strokes in different tones as with a pencil.



Example of drawing: [Pencil] tool

Allows you to draw with strokes in different tones as with a pencil.

The [Pen] tool comes with preconfigured settings called [Sub tool].
You can change the sub tool by clicking the buttons on the [Sub tool] palette.
Furthermore, using the [Tool property] palette, you can configure detailed settings for the selected sub tool.

Memo

Settings available on the [Tool property] vary depending on the selected sub tool. For details on the settings, see "Manga Studio 5.0 Tool Setting Guide".

Brush Tool

The [Brush] tool allows you to draw with strokes that blend multiple colors as with a brush.

Example of drawing: [Brush] tool
Allows you to draw with strokes that blen multiple colors as with a brush.

Important **When [Brush] tool is used on a vector layer, the drawing may have a different touch than when drawn on a raster layer depending on the selected [Sub tool].**

The [Brush] tool comes with preconfigured settings called [Sub tool].
You can change the sub tool by clicking the buttons on the [Sub tool] palette.
Furthermore, using the [Tool property] palette, you can configure detailed settings for the selected sub tool.

Memo **Settings available on the [Tool property] vary depending on the selected sub tool. For details on the settings, see "Manga Studio 5.0 Tool Setting Guide".**

Airbrush Tool

The [Airbrush] tool allows you to draw with blurred strokes as with an air brush.

Example of drawing: [Air brush] tool

Allows you to draw with blurred strokes as with an air brush.

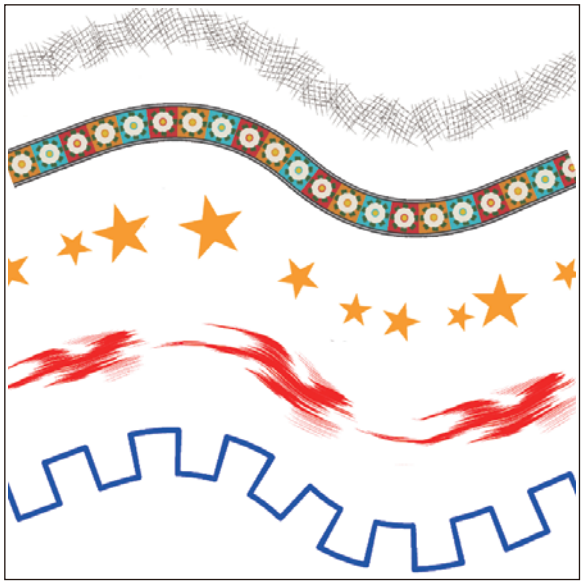
The [Airbrush] tool comes with preconfigured settings called [Sub tool].
You can change the sub tool by clicking the buttons on the [Sub tool] palette.
Furthermore, using the [Tool property] palette, you can configure detailed settings for the selected sub tool.

Memo

Settings available on the [Tool property] vary depending on the selected sub tool. For details on the settings, see "Manga Studio 5.0 Tool Setting Guide".

Decoration Tool

The [Decoration] tool allows you to draw consecutive image patterns and the like.



Example of drawing: [Decoration] tool

The [Decoration] tool comes with preconfigured settings called [Sub tool].
You can change the sub tool by clicking the buttons on the [Sub tool] palette.
Furthermore, using the [Tool property] palette, you can configure detailed settings for the selected sub tool.

Memo

Settings available on the [Tool property] vary depending on the selected sub tool. For details on the settings, see "Manga Studio 5.0 Tool Setting Guide".

Eraser Tool

The [Eraser] tool allows you to erase images, such as already drawn lines. When dragged on the canvas. erases an image.

The [Eraser] tool comes with preconfigured settings called [Sub tool].
You can change the sub tool by clicking the buttons on the [Sub tool] palette.
Furthermore, using the [Tool property] palette, you can configure detailed settings for the selected sub tool.

Memo

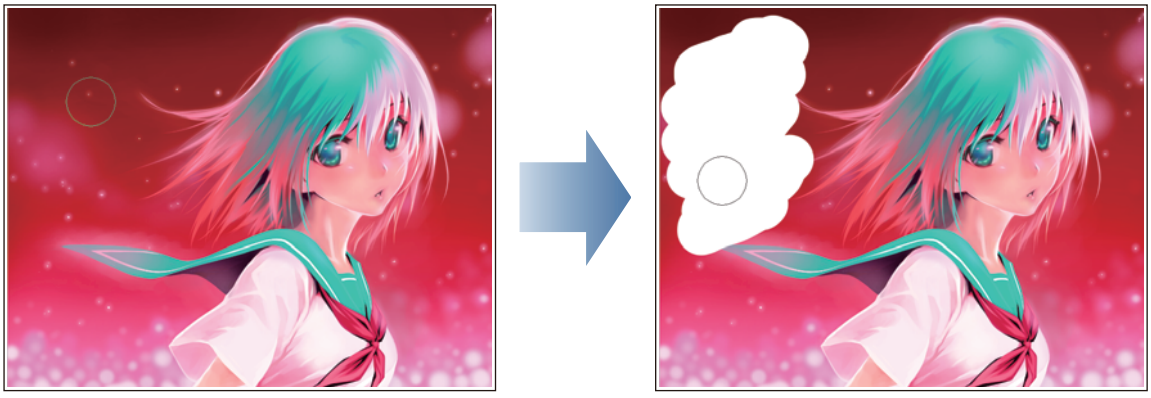
Settings available on the [Tool property] vary depending on the selected sub tool. For details on the settings, see "Manga Studio 5.0 Tool Setting Guide".

Important

Depending on the [Sub tool], the effect may vary between [Raster layer] and [Vector layer].

Example of Sub Tool: Rough eraser (When used on raster layer)

The [Eraser] tool allows you to erase images, such as already drawn lines. When dragged on the canvas. erases an image.

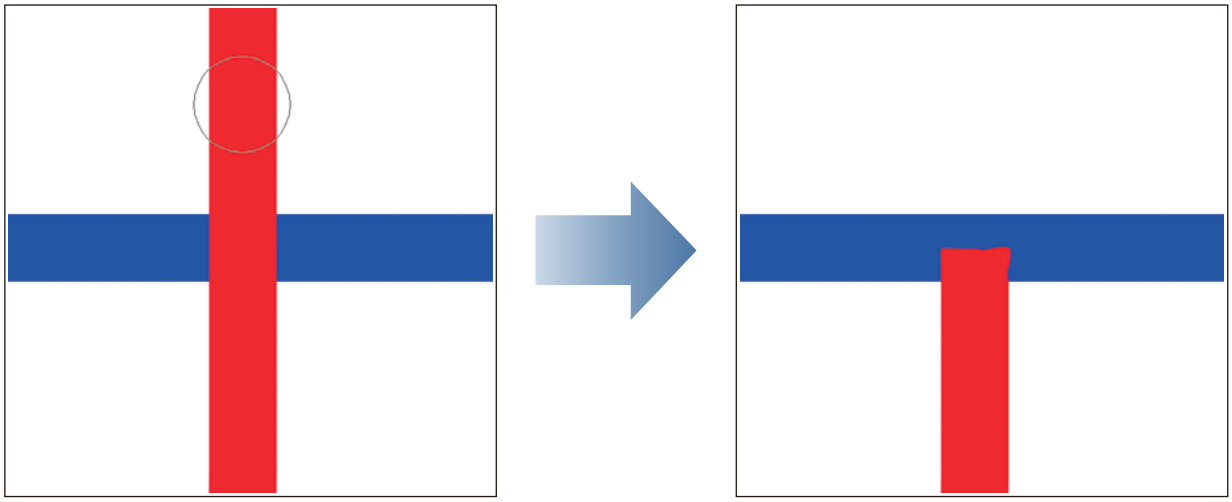


Example of sub tool: Rough eraser (When used on raster layer)

Allows you to erase images, such as already drawn lines. When dragged on the canvas, erases an image.

Example of Sub Tool: For vectors (When used on vector layer)

Erases a line up to the intersection with another line drawn on the [Vector] layer.



Example of sub tool: For vectors (When used on vector layer)

Allows you to erase a line up to the intersection with another line drawn on the [Vector] layer.

Blend Tool

The [Blend] tool blurs the colors in the canvas area where it is dragged as when paint is spread with the fingers.

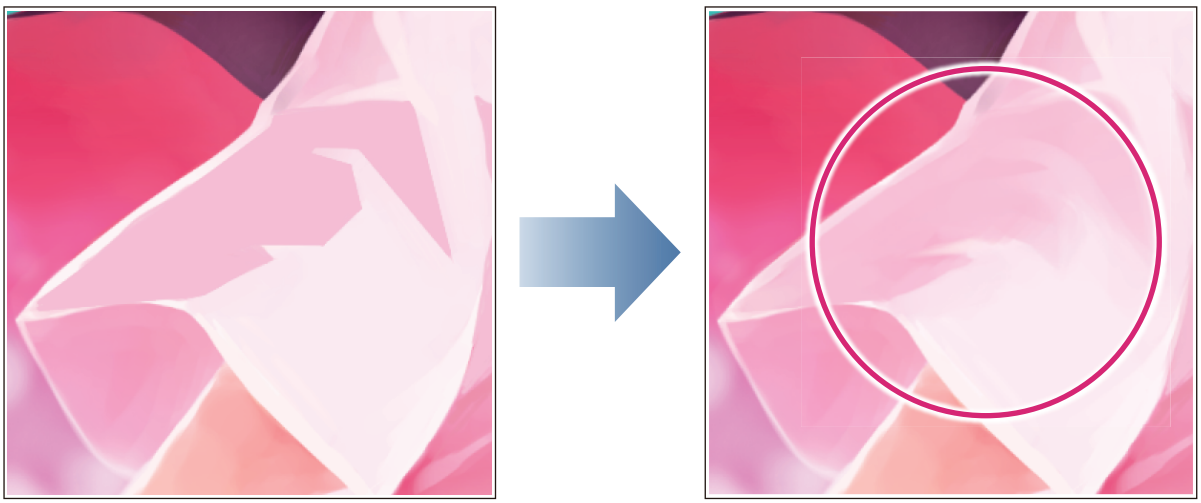
The [Blend] tool comes with preconfigured settings called [Sub tool].
You can change the sub tool by clicking the buttons on the [Sub tool] palette.
Furthermore, using the [Tool property] palette, you can configure detailed settings for the selected sub tool.

Memo

Settings available on the [Tool property] vary depending on the selected sub tool. For details on the settings, see "Manga Studio 5.0 Tool Setting Guide".

Example of Sub Tool: Blend

When [Blend] is selected on the [Sub tool] palette, dragging the tool on the canvas blurs the colors as when paint is spread with the fingers.



Example of sub tool: Color mixing

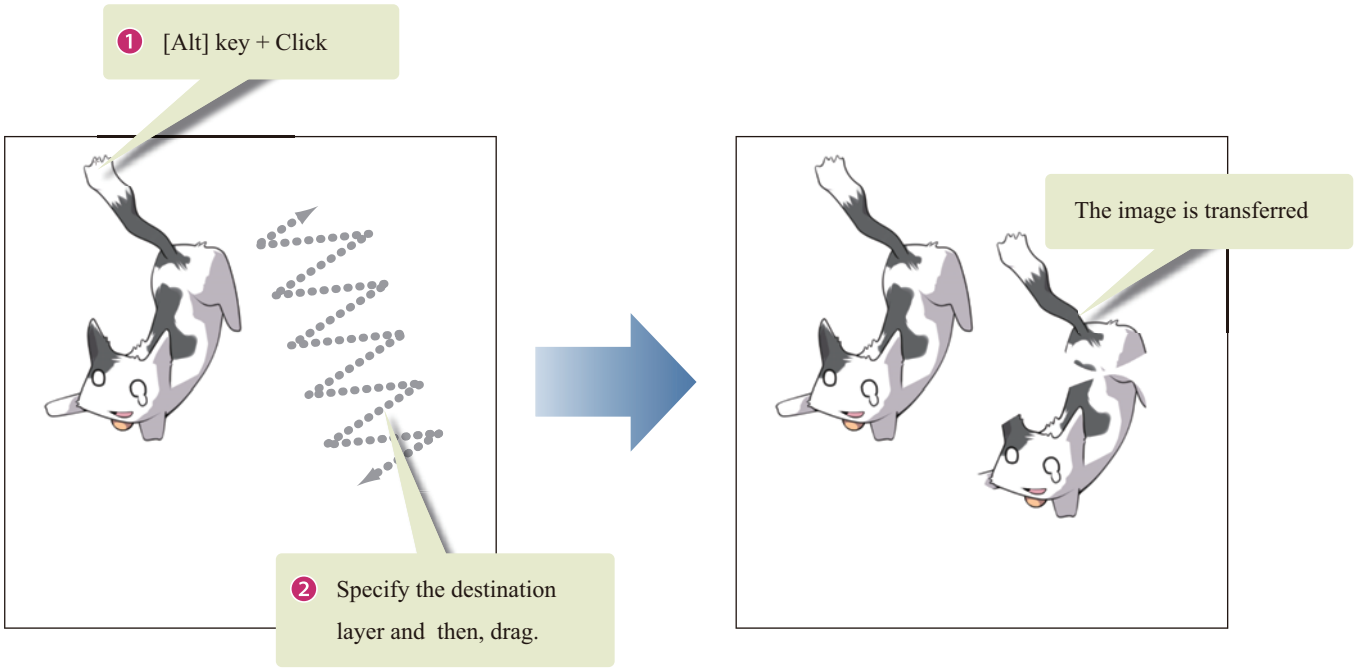
Allows you to blur the colors in the area of the canvas dragged with the tool as when paint is spread with the fingers.

Important

Blend function does not work when [Blend] tool is used on a [Vector] layer.

Example of Sub Tool: Copy stamp

Selecting a portion of an image and dragging the tool on a distant place or another layer as if drawing with a pen allows you to transfer the image. Clicking on the canvas while holding down the [Alt] key allows you to specify the reference.



Example of sub tool: Copy stamp

Selecting a portion of an image and dragging the tool on a distant place or another layer as if drawing with a pen, allows you to transfer the image.

Important

- **The types of layers that can be specified as reference are raster layer and Selection layer only.**
- **Image transfer is possible when the expression colors, drawing colors and the layer mask selection statuses are the same between the reference layer and destination layer.**
- **Image transfer between a layer whose expression color is monochrome and another layer whose expression color is gray is possible if the drawing colors are the same.**

Fill Tool

The [Fill] tool allows you to easily fill a closed area by clicking on it.

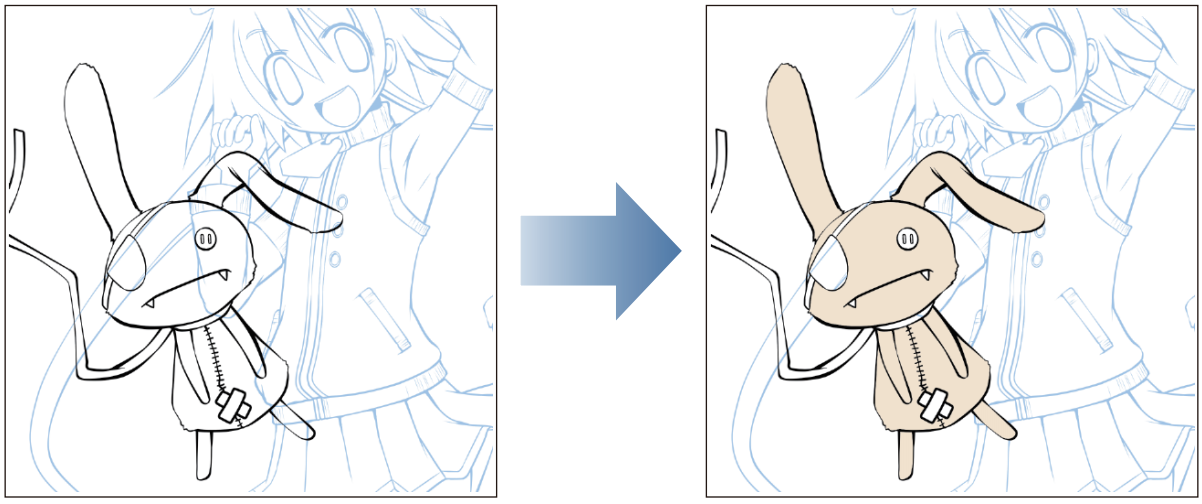
The [Fill] tool comes with preconfigured settings called [Sub tool].
You can change the sub tool by clicking the buttons on the [Sub tool] palette.
Furthermore, using the [Tool property] palette, you can configure detailed settings for the selected sub tool.

Memo

- **Settings available on the [Tool property] vary depending on the selected sub tool. For details on the settings, see "Manga Studio 5.0 Tool Setting Guide".**
- **Use the [Close and fill] and [Paint unfilled area] sub tools when you want to fill a drawing composed of multiple closed areas in one go. They are perfect for coloring areas that are very small and difficult to fill, such as the tip of the hair, or 1-dot lines.**
- **To cancel a fill process that is taking time, press the [Esc] key.**

Example of Sub Tool: Refer edited layer only

Selecting [Refer edit layer only] on the [Sub tool] palette allows you to fill by referring to the layer being edited.

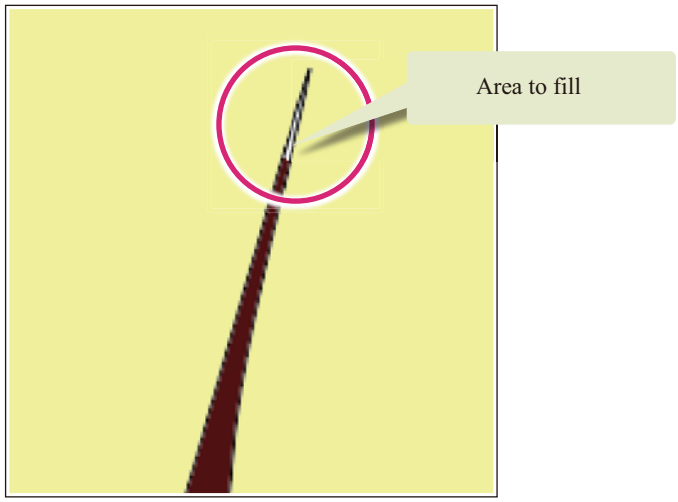


Example of sub tool: Refer edited layer only

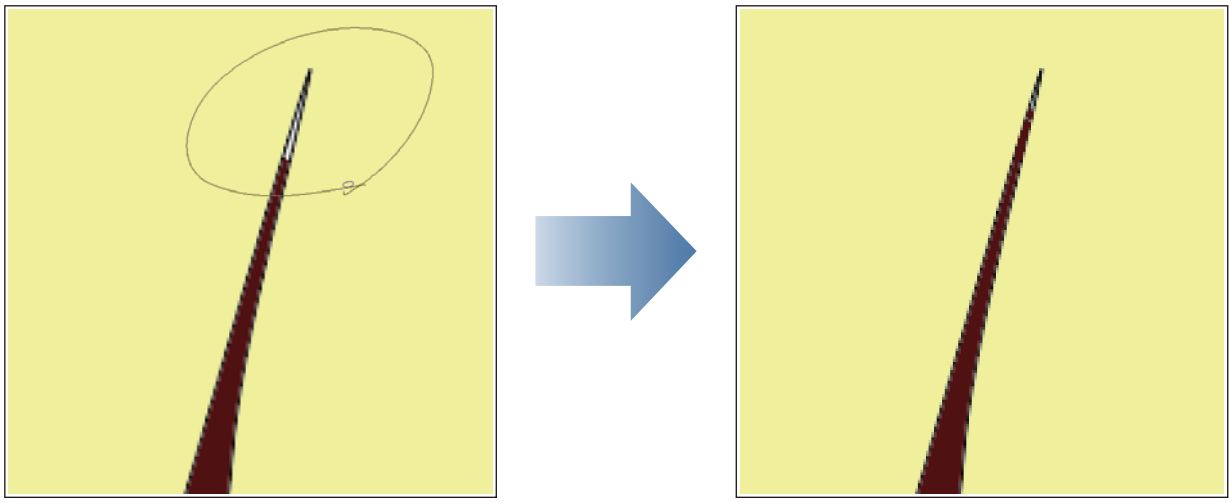
Allows you to fill by referring to the layer being edited (black line drawing).

Example of Sub Tool: Close and fill

Dragging the tool as if enclosing the area to fill allows you to fill closed spots in the area.



Original image

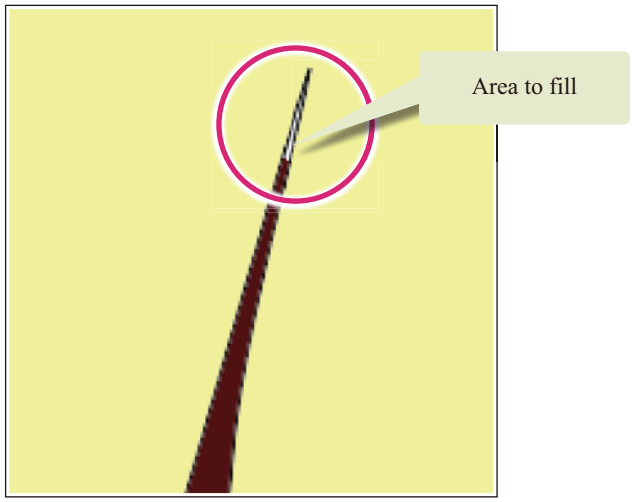


Example of sub tool: Enclose and fill

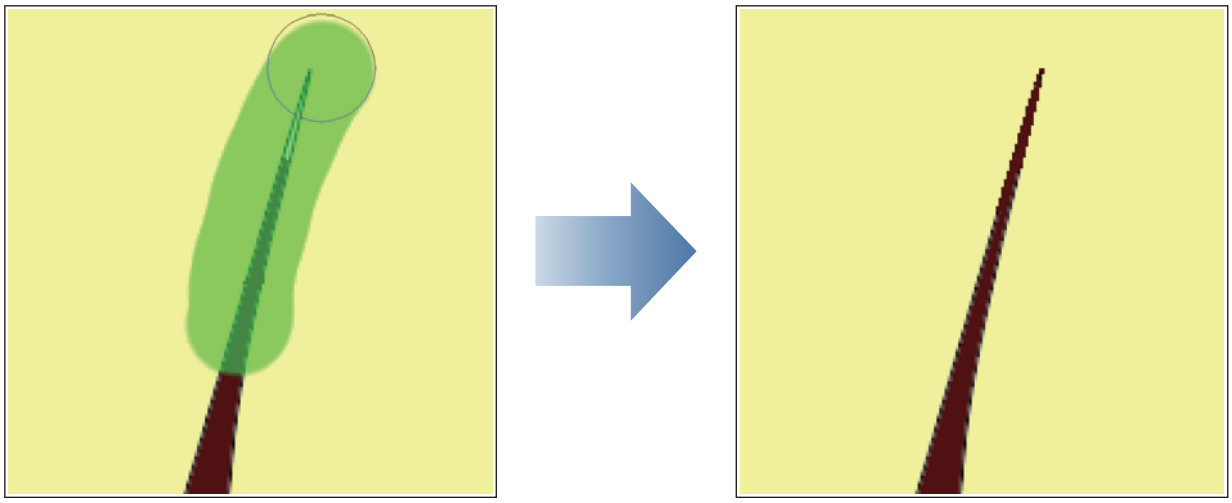
Dragging as if enclosing the area to fill allows you to fill closed spots in the area.

Example of Sub Tool: Paint unfilled area

Dragging the tool as if tracing the area to fill allows you to fill closed spots in the area.



Original image



Example of sub tool: Paint unfilled area

Dragging as if tracing the area to fill allows you to fill closed spots in the area.

Gradient Tool

Dragging the [Gradient] tool on the canvas allows you to draw a gradation from a specified position, for a specified length and in accordance with the settings.

Drag in the direction desired for the gradation.

Example of use: Gradation

The [Gradient] tool comes with preconfigured settings called [Sub tool].
You can change the sub tool by clicking the buttons on the [Sub tool] palette.
Furthermore, using the [Tool property] palette, you can configure detailed settings for the selected sub tool.

Memo

Settings available on the [Tool property] vary depending on the selected sub tool. For details on the settings, see "Manga Studio 5.0 Tool Setting Guide".

Figure Tool

The [Figure] tool allows you to create all kinds of shapes such as straight lines, curves and figures. In addition, it allows you to create frame borders and rulers for drawing manga.

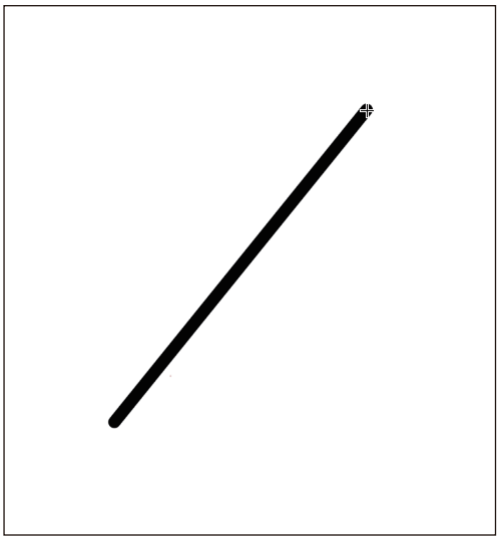
The [Figure] tool comes with preconfigured settings called [Sub tool].
You can change the sub tool by clicking the buttons on the [Sub tool] palette.
Furthermore, using the [Tool property] palette, you can configure detailed settings for the selected sub tool.

Memo

Settings available on the [Tool property] vary depending on the selected sub tool. For details on the settings, see "Manga Studio 5.0 Tool Setting Guide".

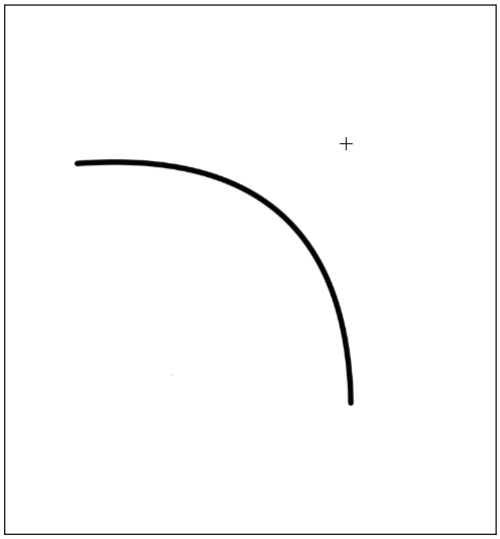
Example of Sub Tool: Straight line/Curve

Selecting [Straight line] or [Curve] on the [Sub tool] palette allows you to draw a single straight line or curve.



Example of sub tool: Straight line

Drag on the canvas to draw a straight line.

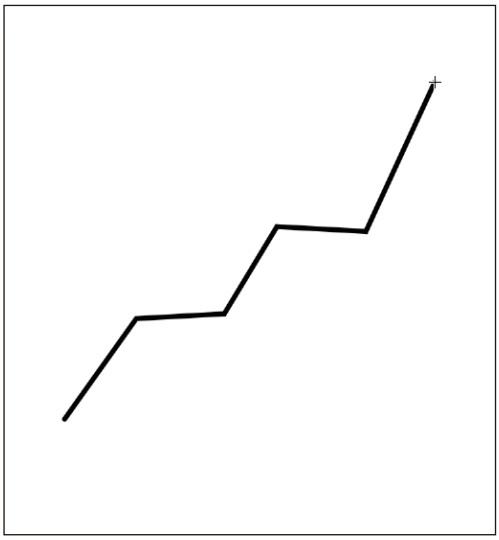


Example of sub tool: Curve

After dragging on the canvas to decide the starting point and end point, specify another point by clicking to adjust the curvature.

Example of Sub Tool: Polyline

Selecting [Polyline] on the [Sub tool] palette allows you to draw a series of connected straight line segments that pass through multiple points.

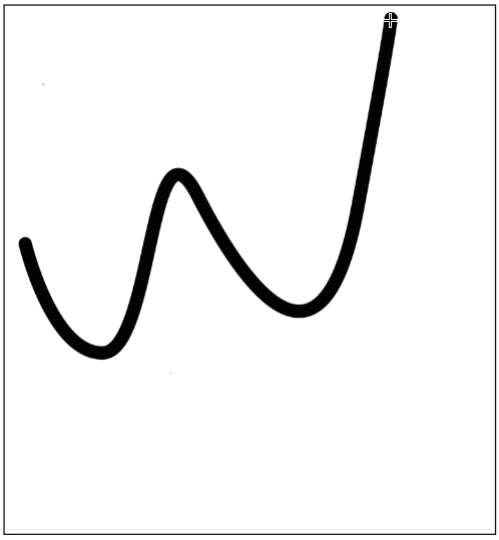


Example of sub tool: Polyline

Specify multiple points to draw a polyline.

Example of Sub Tool: Continuous curve

Selecting [Continuous curve] on the [Sub tool] palette allows you to draw a series of connected straight lines and curves that pass through multiple points.



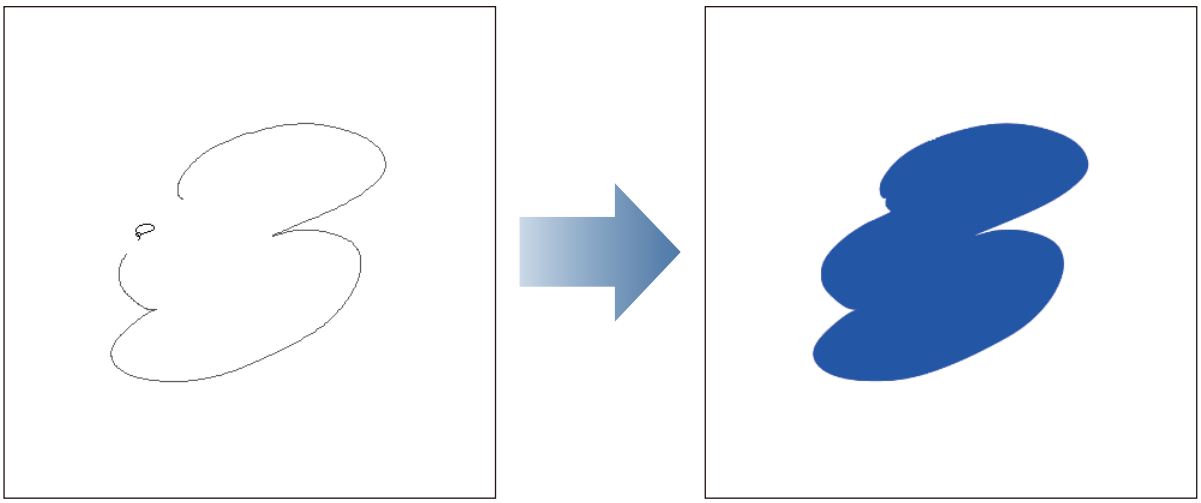
Example of sub tool: Continuous curve

Specify multiple points to draw the curve.

Memo **For details on how to draw continuous curves, see "Drawing Continuous Curves" .**

Example of Sub Tool: Lasso fill

Selecting [Lasso fill] on the [Sub tool] palette allows you to specify an area of any shape to fill.

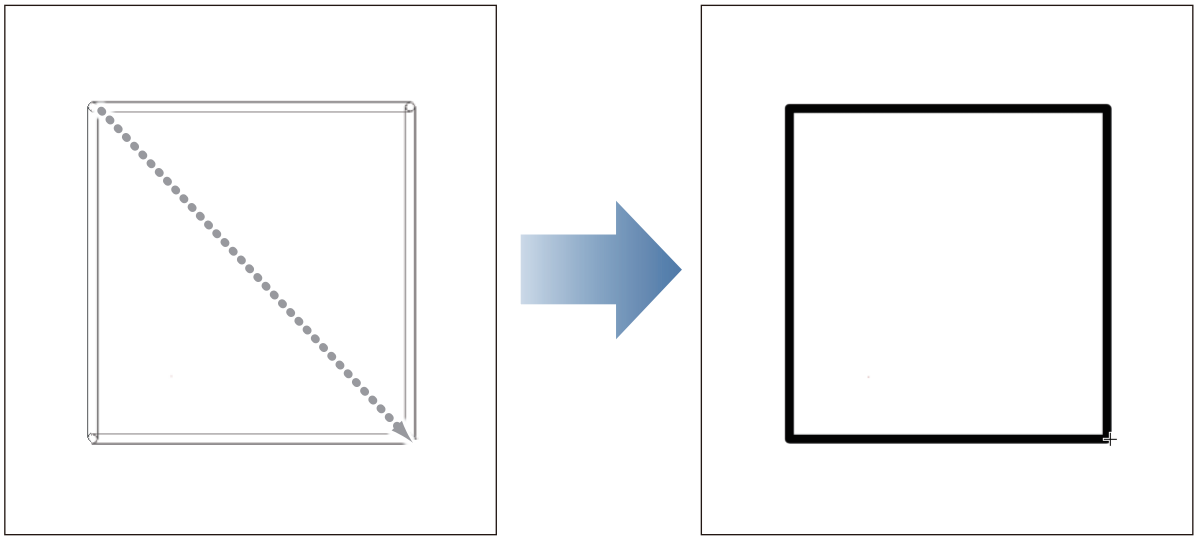


Example of sub tool: Lasso fill

Allows you to specify an area of any shape to fill.

Example of Sub Tool: Rectangle/Ellipse

Selecting [Rectangle] or [Ellipse] on the [Sub tool] palette allows you to draw shapes such as rectangles and ellipses.

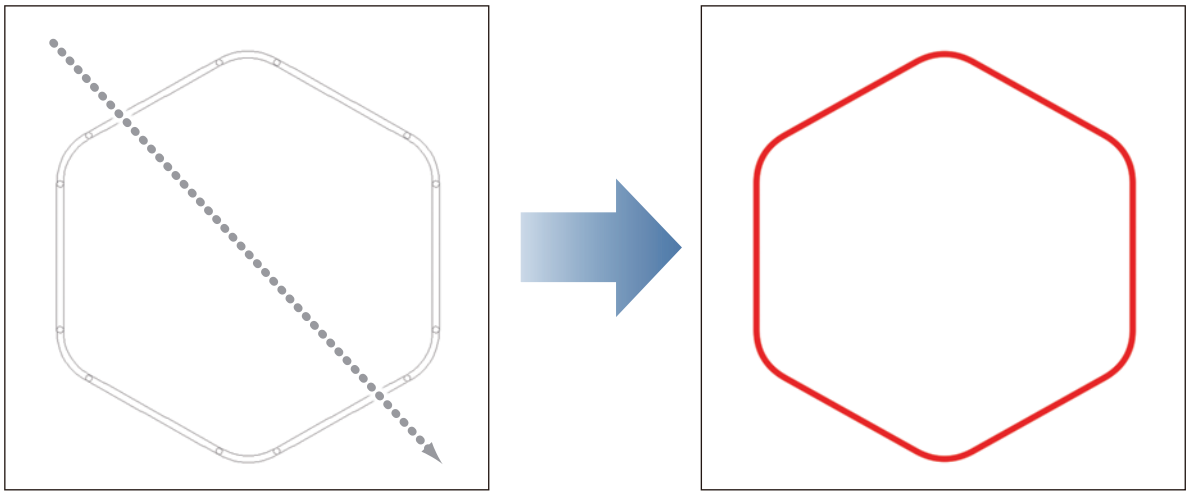


Example of sub tool: Rectangle

Allows you to draw shapes such as rectangles and ellipses.

Example of Sub Tool: Polygon

Selecting [Polygon] on the [Sub tool] palette allows you to create a polygon. On the [Tool property] palette, you can configure the number of vertexes for the polygon, roundness of the corners and the like.



Example of sub tool: Polygon

Allows you to draw polygons.

Example of Sub Tool: Rectangle frame

Selecting [Rectangle frame] on the [Sub tool] palette allows you to draw a rectangular frame for manga.

Example of sub tool: Rectangle frame

Memo **For how to create and edit frame borders, see "Explanation: Frame Cut" .**

Example of Sub Tool: Polyline frame

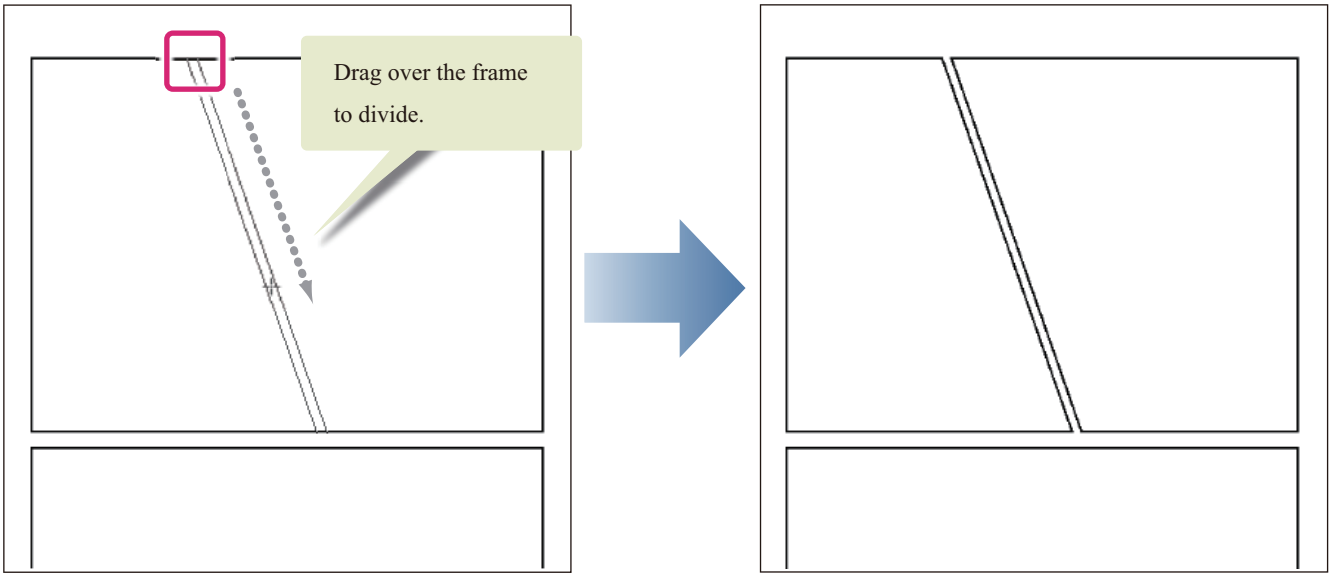
Selecting [Polyline frame] on the [Sub tool] palette allows you to draw a polygonal frame for manga.

Example of sub tool: Polyline frame

Memo **For how to create and edit frame borders, see "Explanation: Frame Cut".**

Example of Sub Tool: Divide frame folder

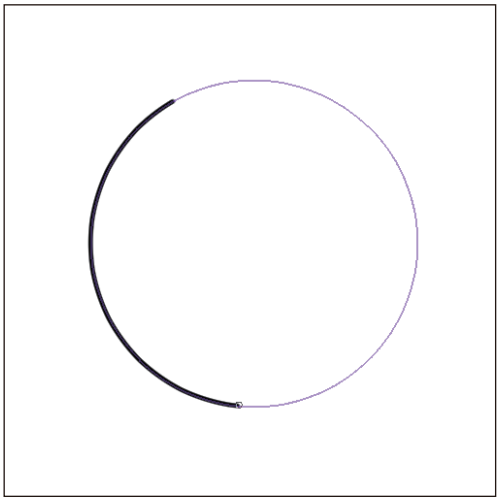
Selecting [Divide frame folder] on the [Sub tool] palette allows you to divide a frame border.



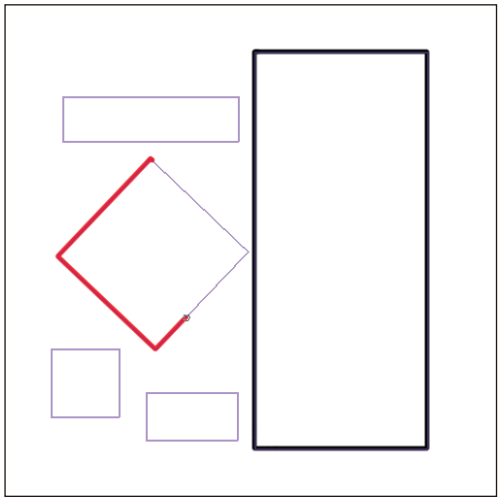
Example of sub tool: Divide frame folder

Example of Sub Tool: Figure ruler

Selecting [Figure ruler] on the [Sub tool] palette allows you to create rulers of rectangles, ellipses and other shapes. Creating a ruler allows you to draw snapped to the ruler.



Example of sub tool: Figure ruler (Ellipse)



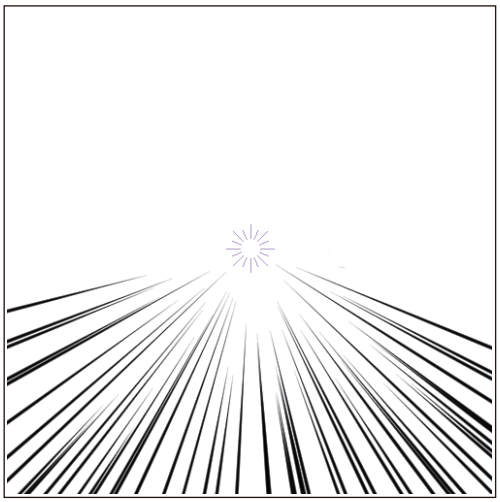
Example of sub tool: Figure ruler (Rectangle)

Memo

For how to create, edit and delete rulers, see "Explanation: Ruler" .

Example of Sub Tool: Special ruler (Focus line)

Selecting [Special ruler] on the [Sub tool] palette allows you to create rulers of parallel lines, irradiation lines, and so on. Creating a ruler allows you to draw snapped to the ruler.



Example of sub tool: Special ruler (Focus line)

Memo

For how to create, edit and delete rulers, see "Explanation: Ruler" .

Example of Sub Tool: Dark stream lines ([Stream line] sub tool group) *

Selecting [Stream line] sub tool group on the [Sub tool] palette allows you to create speed-like effect lines. The color, size and space between the lines that make up the stream line can be adjusted with the [Tool property] palette.

Example of Sub Tool: Dark stream line ([Stream line] sub tool group)

Memo

For how to create and edit stream lines, see "Explanation: Creating and Editing Stream Lines and Saturated Lines *" .

Example of Sub Tool: Dense saturated line ([Saturated line] sub tool group) *

Selecting [Saturated line] sub tool group on the [Sub tool] palette allows you to create focus-like effect lines. The color, size and space between lines that make up the saturated line can be adjusted with the [Tool property] palette.

Example of Sub Tool: Dense saturated line ([Saturated line] sub tool group)

Memo

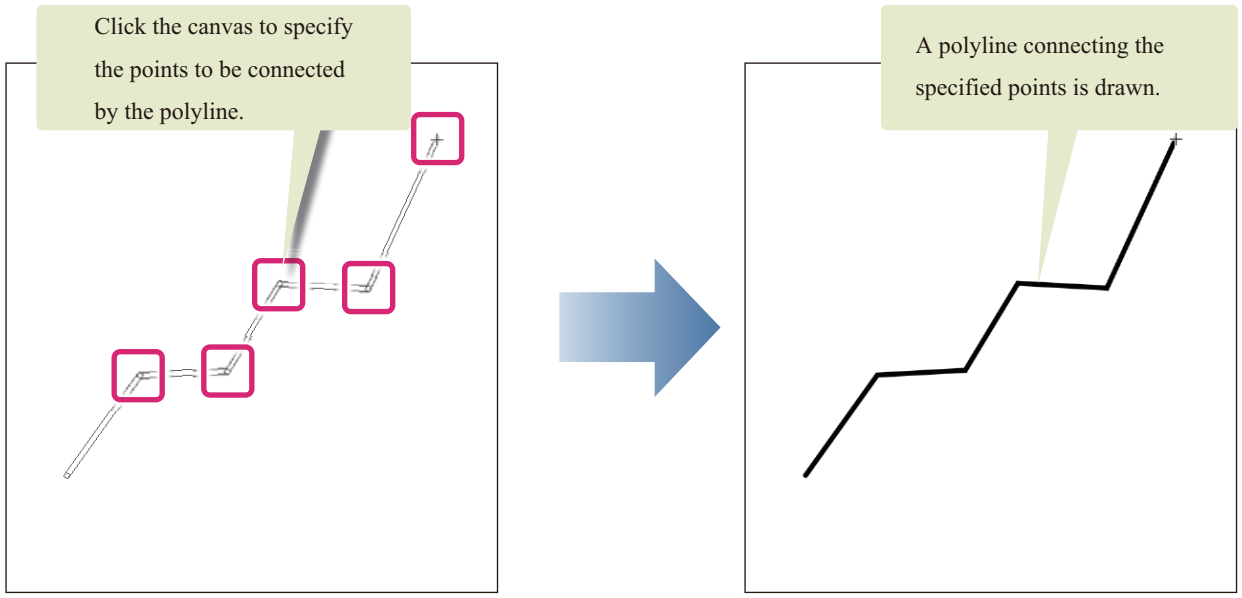
For how to create and edit saturated lines, see "Explanation: Creating and Editing Stream Lines and Saturated Lines *" .

Drawing Continuous Curves

To draw continuous curves, select the drawing method for the [Continuous curve] tool from [Curve] on the [Sub tool detail] palette. The following describes how to draw continuous curves for each drawing method.

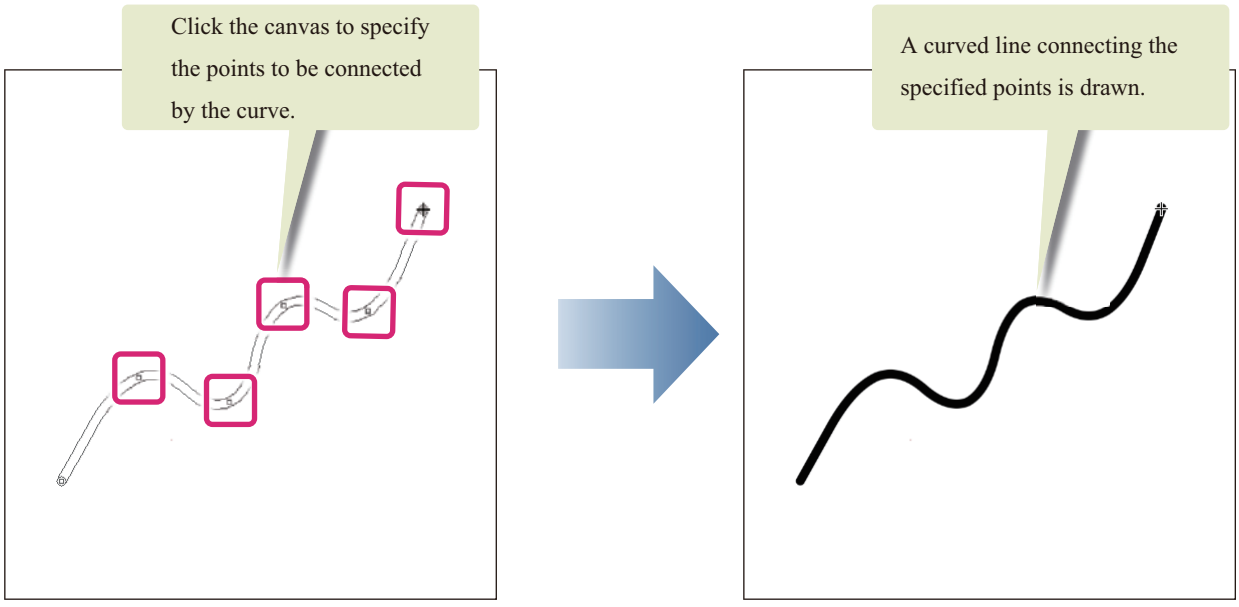
Drawing a Line Using [Straight Line]

Specify the points that will be connected by the polyline. Double click to commit the drawn line.


Click the canvas to specify the points to be connected by the polyline.
A polyline connecting the specified points is drawn.

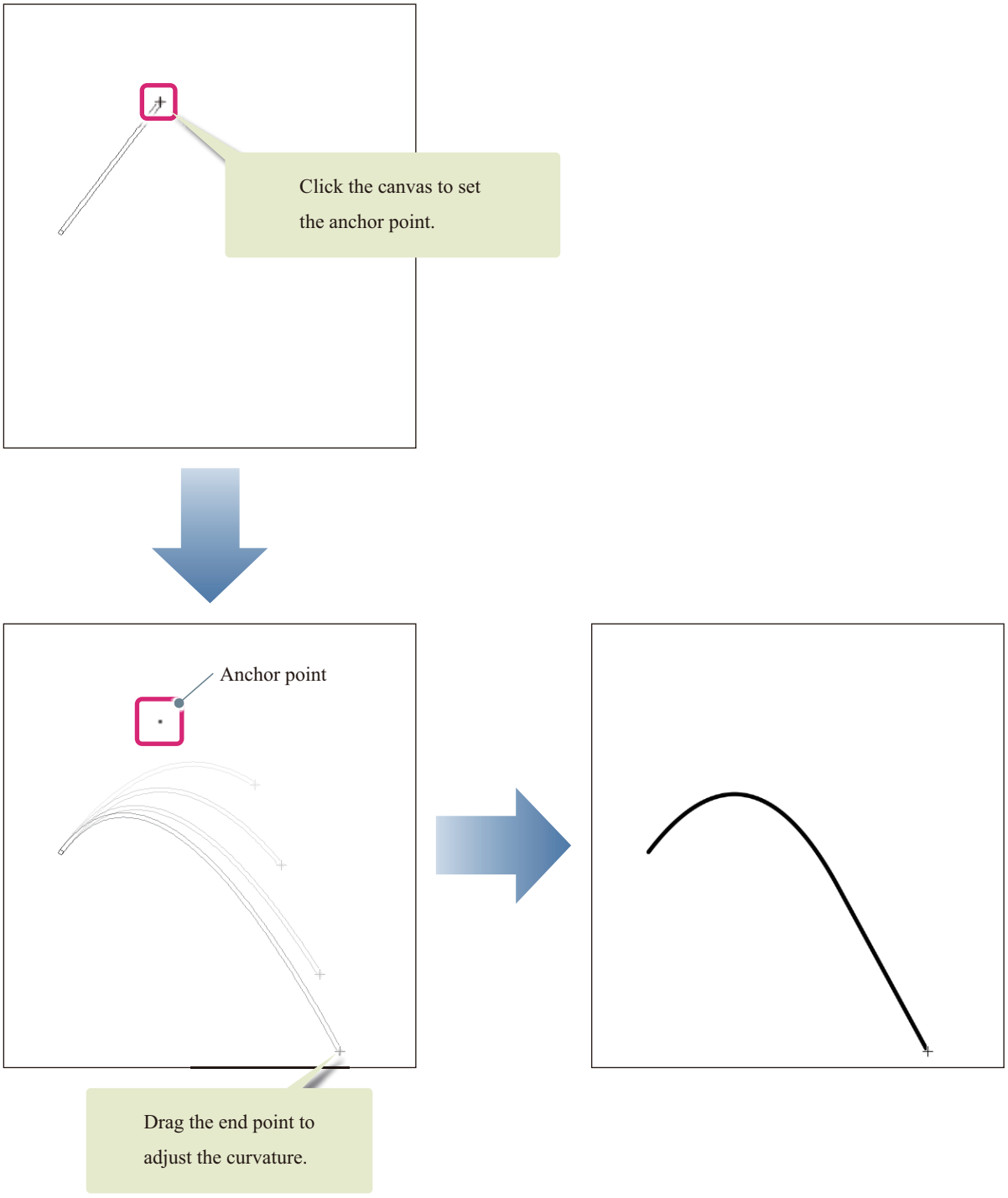
Drawing a Line Using [Spline]

Specify the points that will be connected by the curve. Double click to commit the drawn line.


Click the canvas to specify the points to be connected by the curve.
A curved line connecting the specified points is drawn.

Drawing a Line Using [Quadratic Bezier]

Specify multiple points to be connected by the curve. Click the canvas to set an [Anchor point]. Drag the end point to draw a curve as if it were dragged by the [Anchor point]. Double click to commit the drawn line.

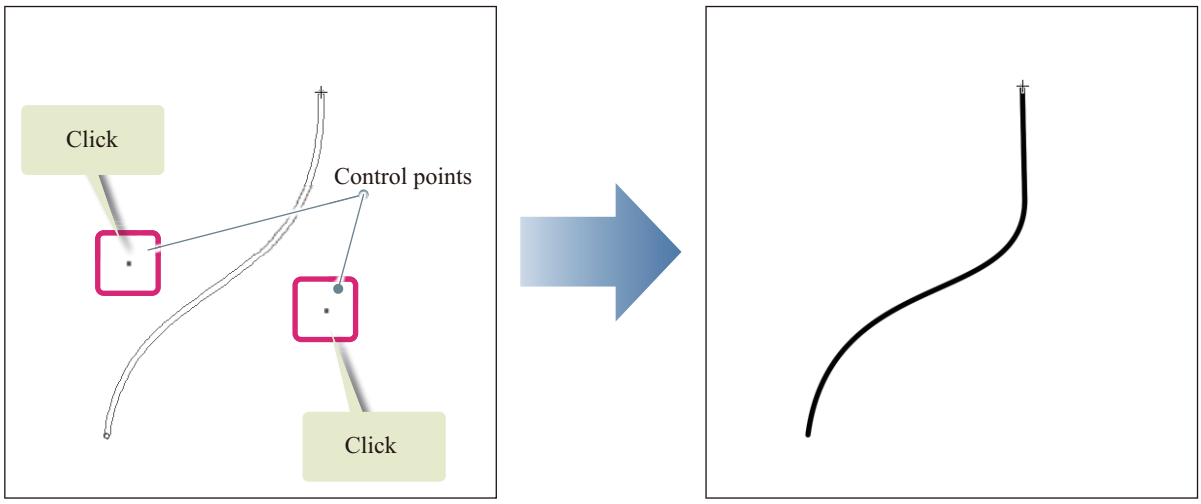


Drawing a Line Using [Cubic Bezier]

When drawing a line with [Cubic Bezier], how it is drawn depends on the [How to specify] setting on the [Sub tool detail] palette.

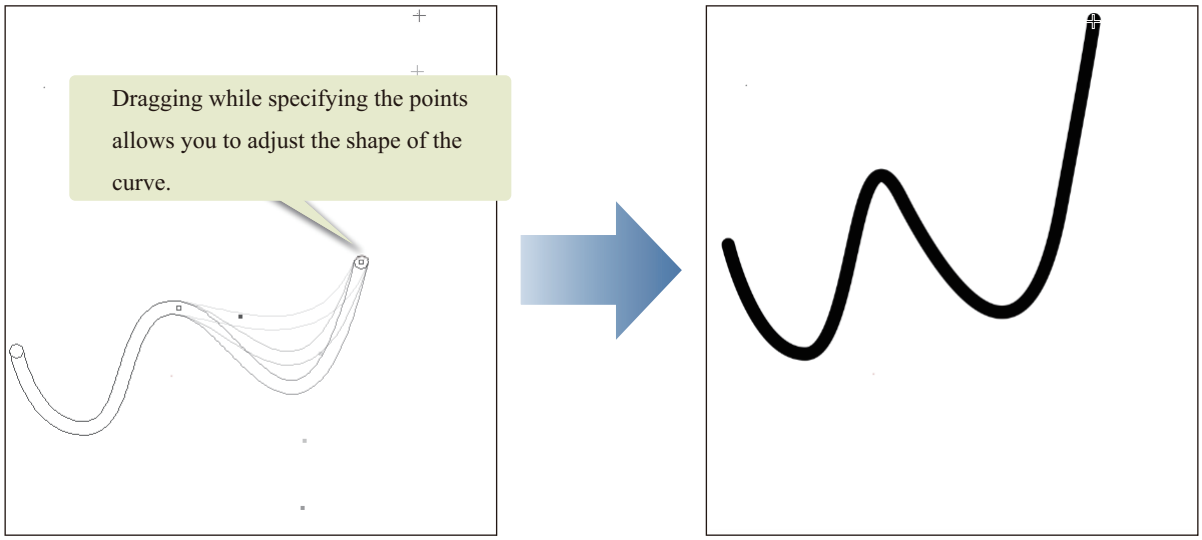
When [How to specify] is [By click]

Click the canvas to specify the control points. The curve is determined based on the location of the control points. Double click to commit the drawn line.



When [How to specify] is [By drag]

Specify the points to be connected by the curve by clicking on the canvas and drag the mouse. The control points move and adjust the curve. Double click to commit the drawn line.



Text Tool

The [Text] tool allows you to create balloons and place text.

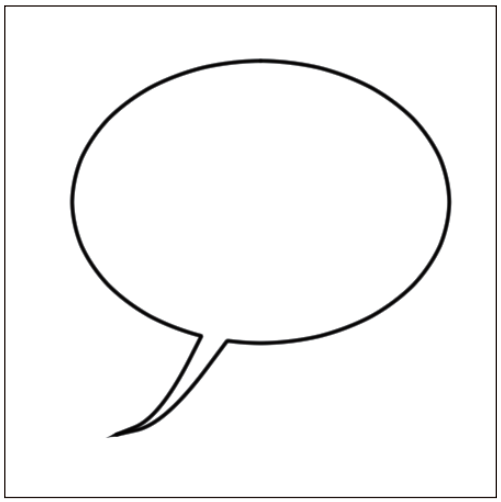
The [Text] tool comes with preconfigured settings called [Sub tool].
You can change the sub tool by clicking the buttons on the [Sub tool] palette.
Furthermore, using the [Tool property] palette, you can configure detailed settings for the selected sub tool.

Memo

- **Settings available on the [Tool property] vary depending on the selected sub tool. For details on the settings, see "Manga Studio 5.0 Tool Setting Guide".**
- **For how to create and edit balloons and text, see "Explanation: Balloons and Text" .**

Example of Sub Tool: Elliptical balloon + Balloon tail

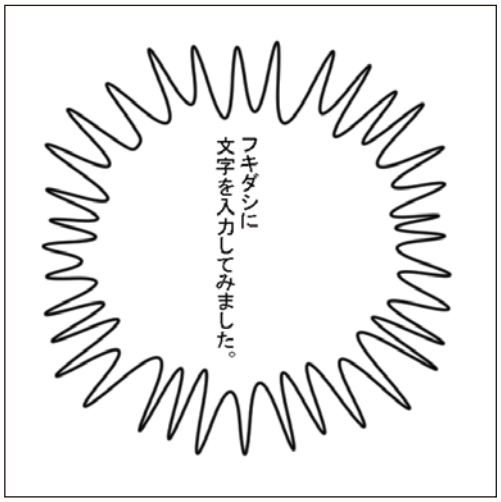
Selecting [Elliptical balloon] on the [Sub tool] palette creates an oval balloon. The figure below shows an example of balloon to which a tail has been added afterwards by selecting [Balloon tail] on the [Sub tool] palette.



Example of sub tool: Elliptical balloon + Balloon tail

Example of Sub Tool: Curve balloon + Text

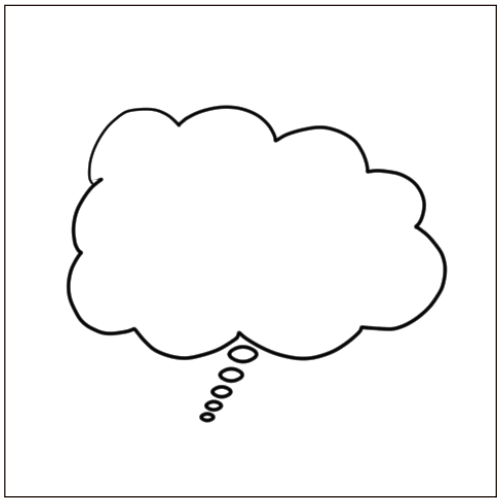
Selecting [Curve balloon] on the [Sub tool] palette creates a balloon made of polylines or continuous curves. The figure below shows an example of balloon to which text has been added afterwards by selecting [Text] on the [Sub tool] palette.



Example of sub tool: Curve balloon + Text

Example of Sub Tool: Balloon pen + Thought balloon tail

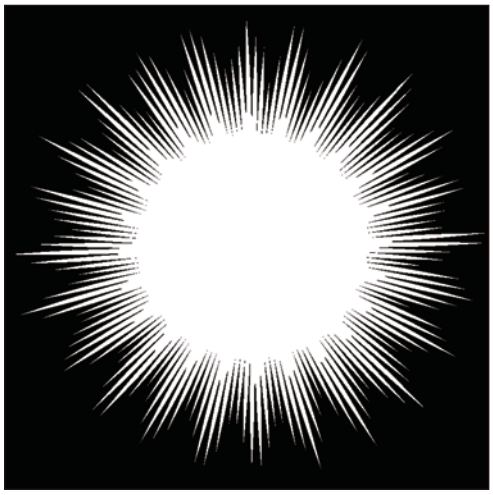
Selecting [Balloon pen] on the [Sub tool] palette creates a hand-drawn type balloon. The figure below shows an example of balloon to which a thought balloon tail has been added afterwards by selecting [Thought balloon tail] on the [Sub tool] palette.



Example of sub tool: Balloon pen + Thought balloon tail

Example of Sub Tool: Sea urchin flash ([Flash] sub tool group) *

Selecting [Flash] sub tool group on the [Sub tool] palette allows you to create flare effect lines. The color, size and space between lines that make up the sea urchin flash can be adjusted with the [Tool property] palette.



Example of Sub Tool: Sea urchin flash ([Flash] sub tool group)

Memo

The [Flash] sub tool group is drawn using saturated lines. For how to create and edit saturated lines, see "Explanation: Creating and Editing Stream Lines and Saturated Lines *" .

Correct line Tool/Garbage cleaner Tool

The [Correct line] tool is a tool to correct drawings on the [Vector] layer, frame borders, balloons and rulers. It allows you to correct control points, line width and the like.

The [Garbage cleaner] tool automatically detects dirty spots on the canvas. It can erase dust of up to a specified size, fill in the surrounding color, as well as select only areas with dirty spots.

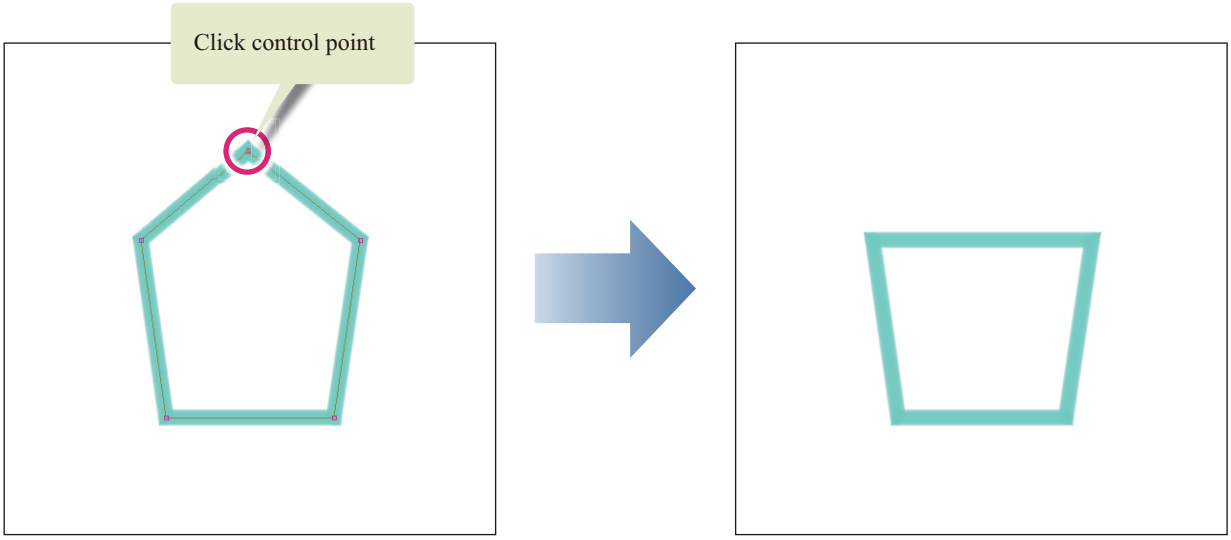
The [Correct line] tool and [Garbage cleaner] tool come with preconfigured settings called [Sub tool].
You can change the sub tool by clicking the buttons on the [Sub tool] palette.
Furthermore, using the [Tool property] palette, you can configure detailed settings for the selected sub tool.

Memo

Settings available on the [Tool property] vary depending on the selected sub tool. For details on the settings, see "Manga Studio 5.0 Tool Setting Guide".

Example of Sub Tool: Control point

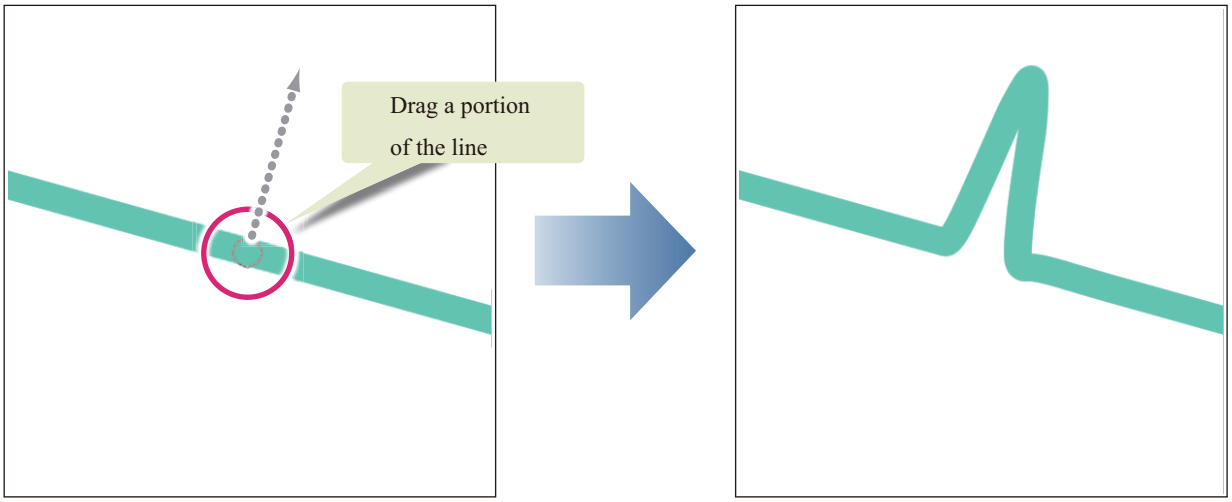
Selecting [Control point] on the [Sub tool] palette allows you to move, add and delete control points, switch corners, change the line width and density, and so on. The figure below is an example of [Delete control point].



Example of sub tool: Control point (Delete control point)

Example of Sub Tool: Pinch vector line

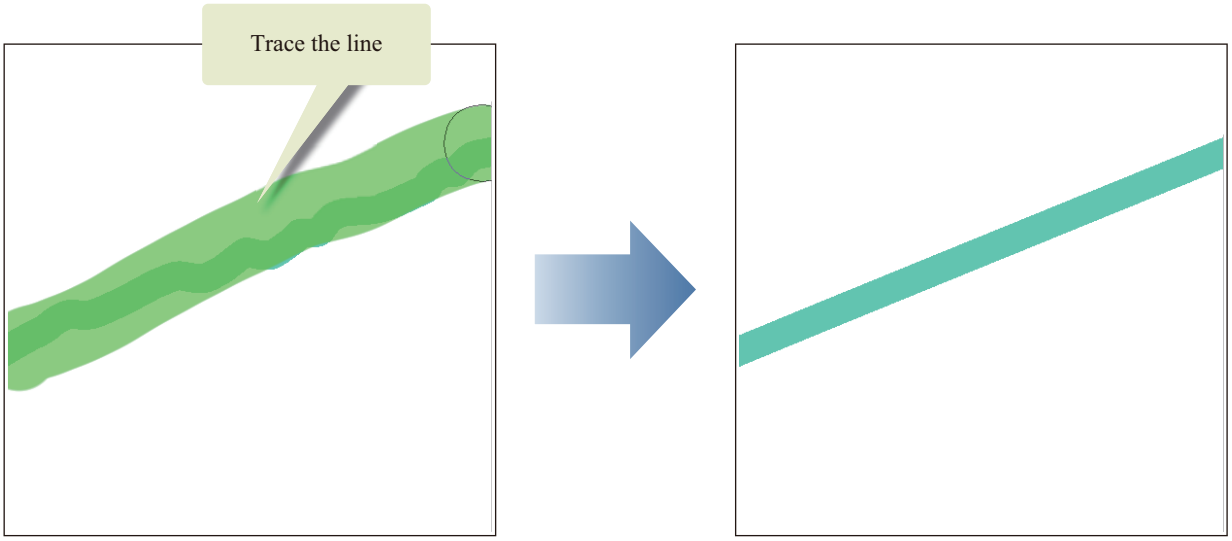
Selecting [Pinch vector line] on the [Sub tool] palette allows you to drag a portion of the line to transform. You can also connect multiple vector lines as well as add control points to the line.



Example of sub tool: Pinch vector line

Example of Sub Tool: Simplify vector line

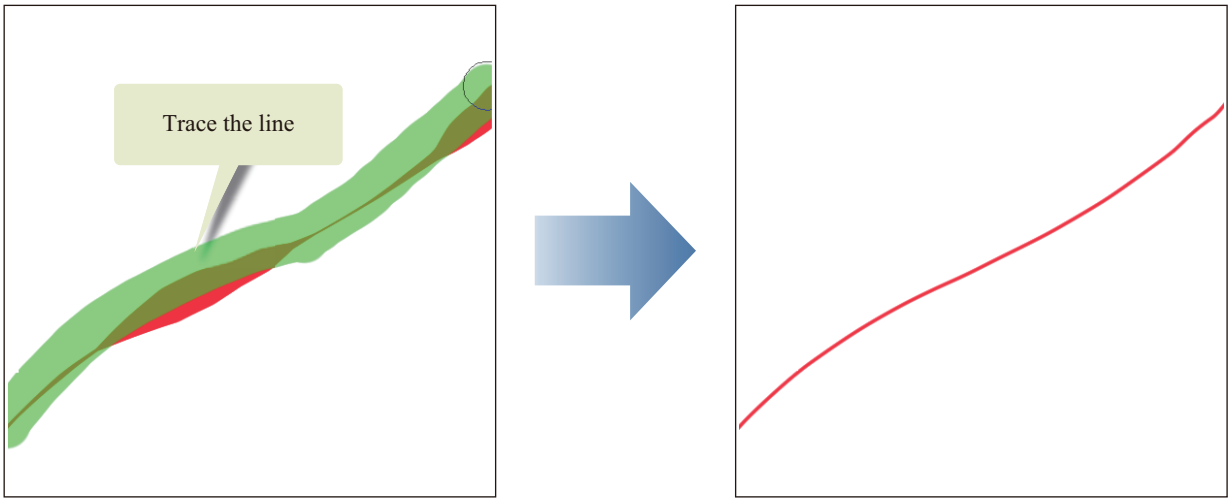
Selecting [Simplify Vector Line] on the [Sub tool] palette allows you to reduce the number of control points to simplify the line.



Example of sub tool: Simplify vector line

Example of Sub Tool: Correct line width

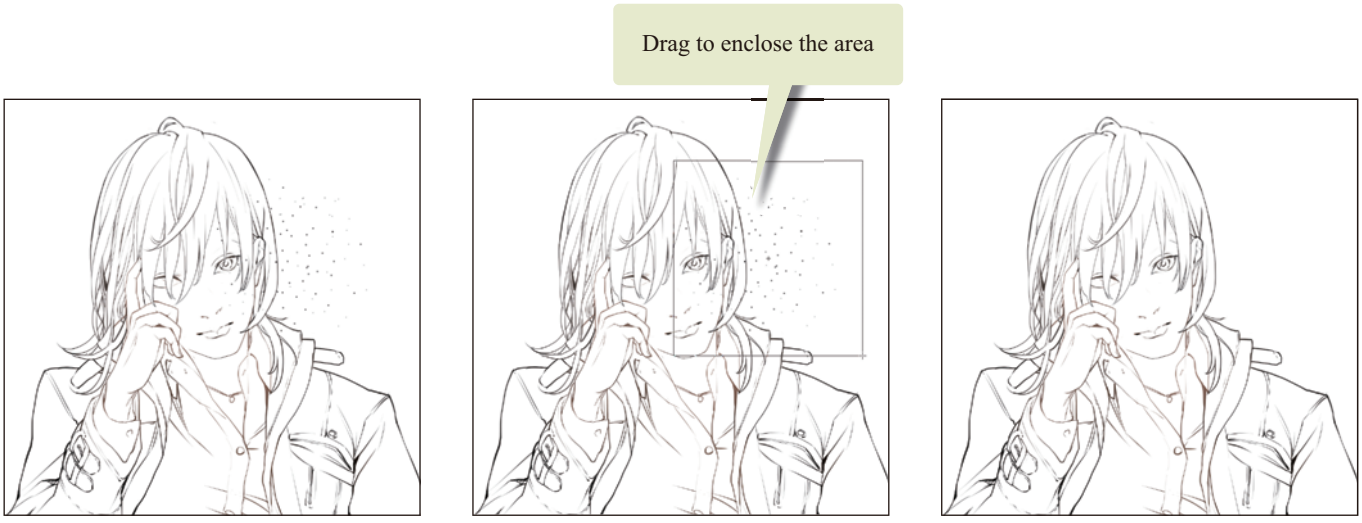
Selecting [Correct line width] on the [Sub tool] palette allows you to scale up/down the line width. The figure below is an example where the line width has been made uniform with [Fix width].



Example of sub tool: Line width correction (Fix width)

Example of Sub Tool: Garbage cleaner

Selecting [Garbage cleaner] on the [Sub tool] palette allows you to erase dirty spots on the canvas. Dragging around the area to clean makes the tool automatically detect dirty spots and erase.

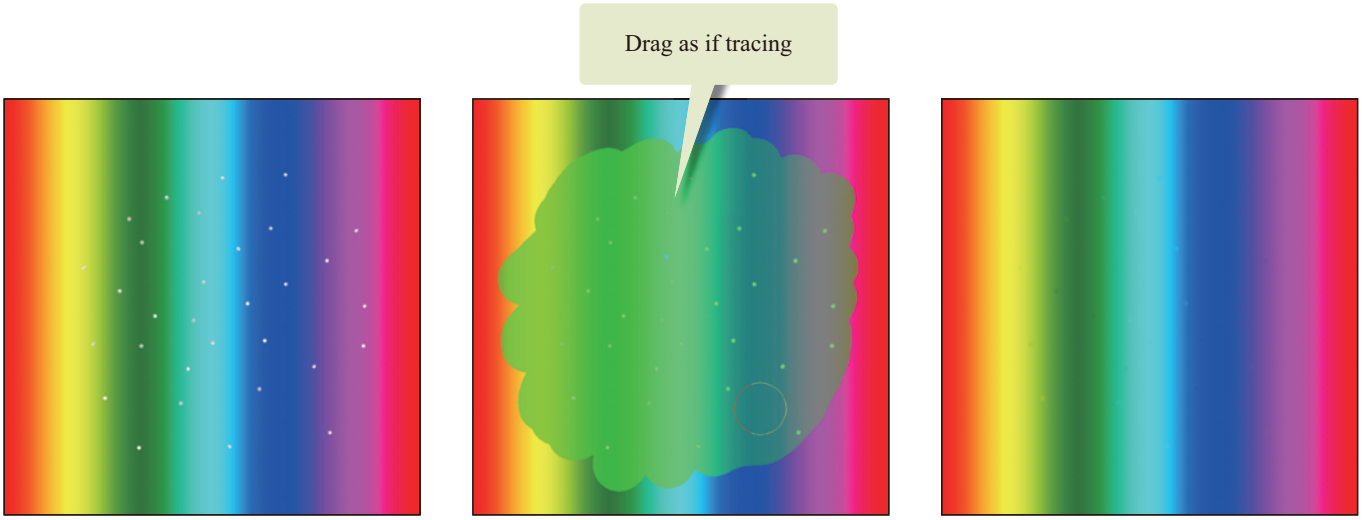


(1) Original image (2) During dust removal (3) After dust removal

Example of sub tool: Garbage cleaner

Example of Sub Tool: Fill leftover

Selecting [Fill leftover] on the [Sub tool] palette allows you to fill small transparent and translucent spots within an opaque area in the predominant color around the spots. Specify the area you want to fill by dragging as if tracing.

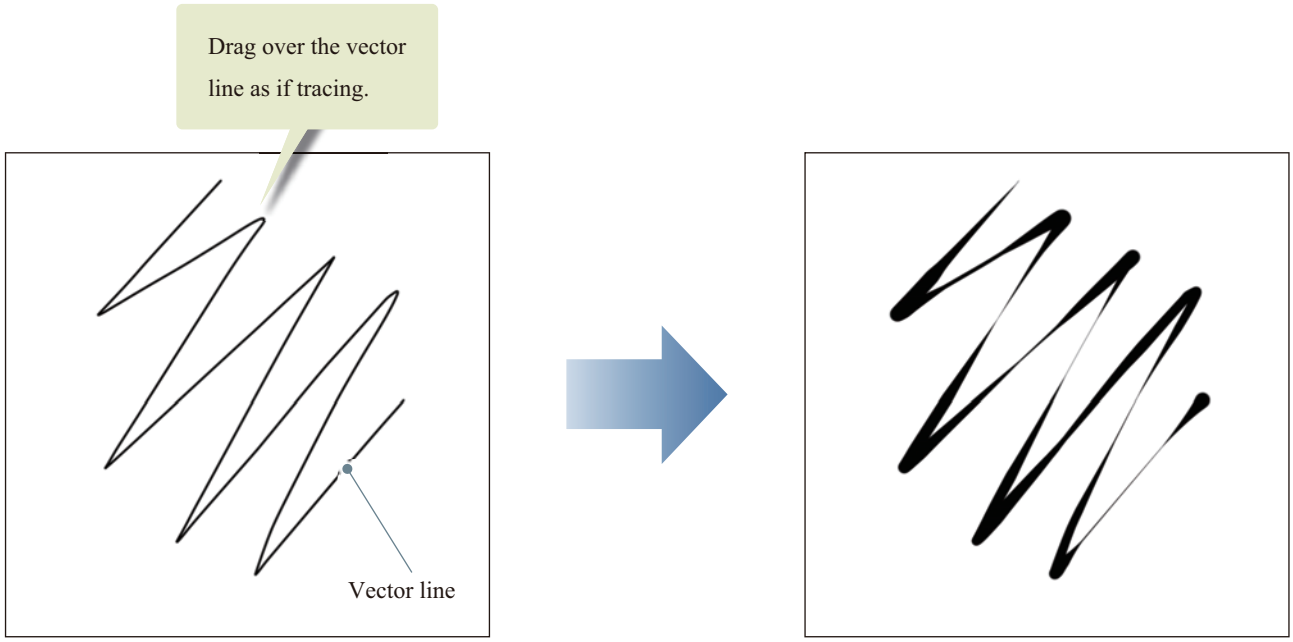


(1) Original image (2) Specifying the unfilled area to paint (3) After paint unfilled area

Example of sub tool: Fill leftover

Example of Sub Tool: Redraw line width

Selecting [Redraw line width] on the [Sub tool] palette allows you to change the line width by dragging over the vector line as if tracing. Furthermore, if [Pen pressure] is configured for [Affected by] on the [Tool property] palette for the brush size, you can adjust the line width by adjusting the pen pressure.



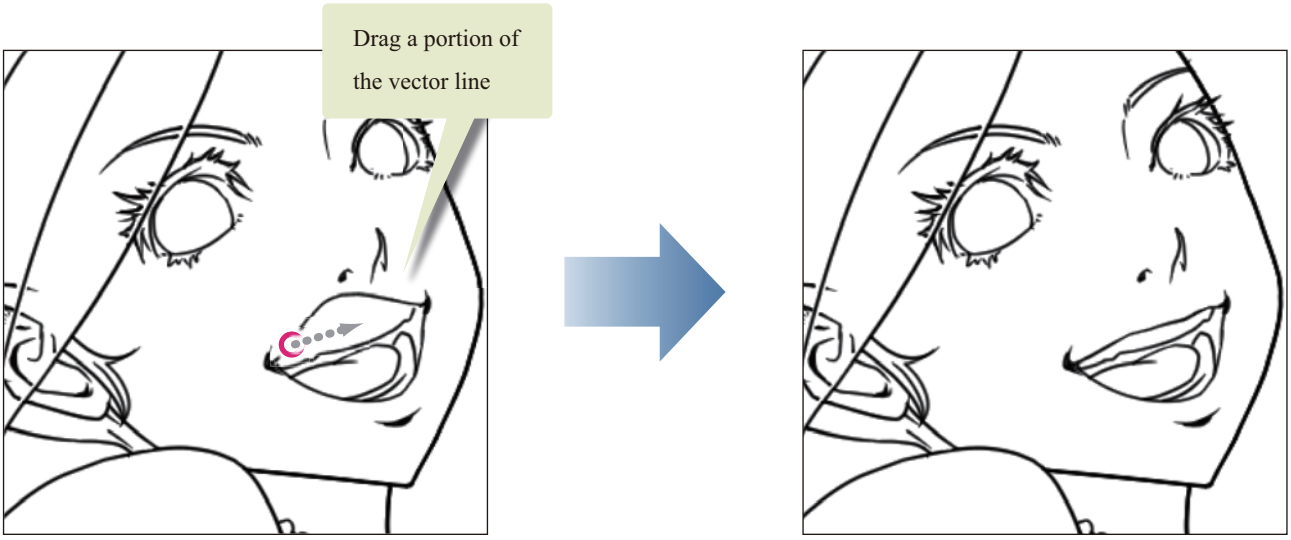
Example of sub tool: Redraw vector line width

Memo

- **[Redraw line width] can change the line width of lines drawn on the [Vector] layer, as well as frame borders in a [Frame folder] and drawing lines on the [Balloon] layer.**
- **For details on [Affected by], see "Manga Studio 5.0 Tool Setting Guide".**

Example of Sub Tool: Redraw Vector Line

Selecting [Redraw Vector Line] on the [Sub tool] palette allows you to transform a vector line by dragging a portion of it.



Example of sub tool: Redraw vector line

Memo

The [Redraw Vector Line] can transform the following vector lines:

- **Drawing lines on the [Vector] layer**
- **Frame borders on the [Frame folder]**
- **Drawing lines on the [Balloon] layer**
- **[Straight line ruler], [Curve ruler], [Figure ruler] and [Ruler pen] of the [Ruler] sub tool**

Color Palettes

This chapter introduces color palette functions in Manga Studio 5.0.

- Color wheel Palette
- Color slider Palette
- Color set Palette
- Intermediate color Palette
- Approximate color palette

What Are Color Palettes?

Manga Studio 5.0 comes with the following color palettes to select a color from.

Color wheel palette	Allows you to configure a drawing color by clicking or dragging the [Color wheel].
Color slider palette	Allows you to configure a drawing color with sliders. You can configure colors from the [HSV], [CMYK [or [RGB] color spaces in accordance with the use.
Color set palette	With [Color set] palette, in addition to selecting your color from a list of typical colors, you can register and manage frequently used colors as a [Color set].
Intermediate color palette	The [Intermediate color] palette allows you to select an intermediate color with respect to reference colors configured in the four corners.
Approximate color palette	The [Approximate color] palette allows you to select a color proximate to a selected drawing color.

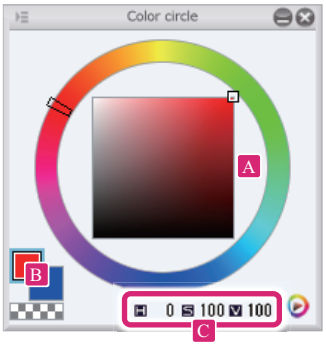
Functions of Color Palettes

This section describes the functions of the color palettes by palette.

Color wheel Palette

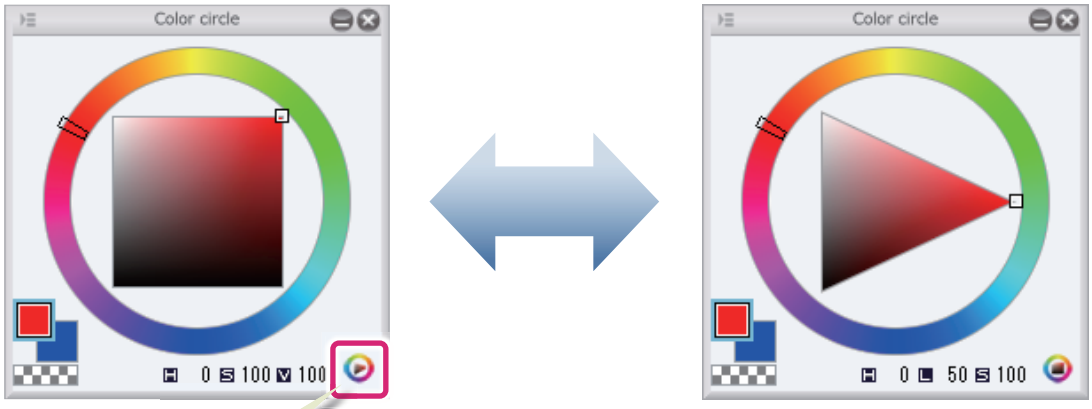
The [Color wheel] palette displays when [Window] menu → [Color Wheel] is selected.

Allows you to configure the drawing color by clicking or dragging the [Color wheel].



A. Color wheel

Allows you to configure the drawing color by clicking or dragging the [Color wheel]. Clicking the icon on the lower right of the palette allows you to switch the color space.



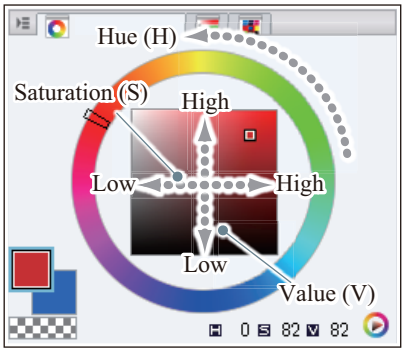
❶ HSV color space

❷ HLS color space

Click to switch the color space.

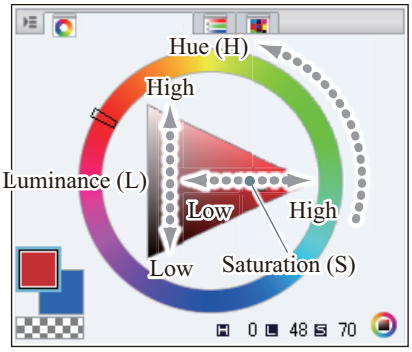
(1) HSV color space

A color is specified by Hue (H), Saturation (S) and Value (V).



(2) HLS color space

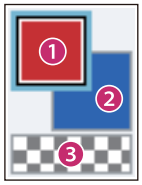
A color is specified by Hue (H), Luminance (L) and Saturation (S).



B. Color Icon

Displays the currently selected drawing color along with readily available drawing colors.

In the example below, the readily available colors are (in the order of their availability) "red", "blue" and "transparent". "Red", which is displayed with a blue border, is the currently selected drawing color. To change the color, click the relevant color indicator.



(1) Main color

Set the primary (most frequently used) color.

(2) Sub color

Set the next most frequently used color.

This will be the background color when you specify [Create both line and fill] with the [Figure] tool, or you create a balloon.

(3) Transparent color

Select to use transparent color.

C. HSV value/RGB value

Displays numerically the HSV value of the drawing color in the lower part of the palette. Clicking the HSV value changes the indication to RGB value.

Color wheel Palette Menu

The following describes the functions included in the menu that displays when you click [Palette menu] on the upper left corner of the [Color wheel] palette.

HSV color space

Switches the color space to HSV. HSV is an acronym for Hue, Saturation and Value.

HLS color space

Switches the color space to HLS. HLS is an acronym for Hue, Luminance and Saturation.

Hide color wheel palette

Hides the [Color wheel] palette.

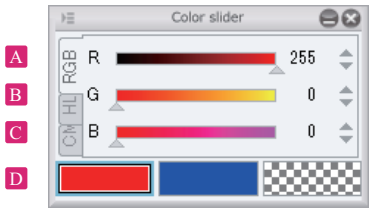
Memo

To display again a palette you have hidden, select the palette to display from the [Window] menu.

Color slider Palette

The [Color slider] palette displays when [Window] menu → [Color Slider] is selected.

The [Color slider] palette allows you to configure the drawing color with sliders.



A. RGB lib

Specifies a drawing color by RGB. RGB is an acronym for Red, Green and Blue, and indicates the light's three primary colors. RGB express colors displayed on CRT monitors, LCD monitors and the like.

B. HSV/HLS lib

In HSV color space, colors are specified by Hue, Saturation and Value.

In HLS color space, colors are specified by Hue, Luminance and Saturation.

Memo

You can switch the color space by using the menu displayed when you click [Palette menu] on the upper left corner of the [Color slider] palette. For details on how to switch color spaces, see "Color slider Palette Menu" .

C. CMYK lib

Specifies a drawing color by CMYK. CMYK is an acronym for Cyan, Magenta, Yellow and Black, and indicates the primary colors used in color printing. CMYK expresses colors for printing.

D. Color Icon

Displays the currently selected drawing color along with readily available drawing colors.

In the example below, the readily available colors are (in the order of their availability) "red", "blue" and "transparent". "Red", which is displayed with a blue border, is the currently selected drawing color. To change the color, click the relevant color indicator.

(1) Main color

Set the primary (most frequently used) color.

(2) Sub color

Set the next most frequently used color.

(3) Transparent color

Select to use transparent color.

Color slider Palette Menu

The following describes the functions included in the menu that displays when you click [Palette menu] on the upper left corner of the [Color slider] palette.

HSV color space

Switches the color space to HSV. HSV is an acronym for Hue, Saturation and Value.

HLS color space

Switches the color space to HLS. HLS is an acronym for Hue, Luminance and Saturation.

Show color icon

When turned on, displays the color icons.

Hide color slider palette

Hides the [Color slider] palette.

Memo

To display again a palette you have hidden, select the palette to display from the [Window] menu.

Color set Palette

To display the [Color set] palette, select [Window] menu → [Color Set].

With [Color set] palette, in addition to selecting your color from a list of typical colors, you can register and manage frequently used colors as a [Color set].

(1) Show color set

Displays a list of [Color sets] from which you can select a [Color set].

(2) Edit color set

Clicking this item opens the [Edit color set] dialog box. The [Edit color set] dialog box allows you to add, select, edit and delete colors in the color set.

Memo

For details on the [Edit color set] dialog box, see "[Edit color set] Dialog Box" .

(3) Color set list

Displays the [Color set] selected in [Show color set].
Clicking a color tile replaces the color in the [Color icon] on the [Color slider] palette with that of the clicked color tile.

Memo

- **Dragging a tile while holding down the [Ctrl] key allows you to move the tile.**
- **Clicking another tile while holding down the [Alt] key copies the currently selected color to the other tile.**

(4) RGB value/HSV value

Displays numerically the RGB value of the drawing color in the lower part of the palette. Clicking the RGB value changes the indication to HSV value.

(5) Replace color

Changes the color of the tile currently selected on the [Color set] with the current drawing color.

(6) Add color

Adds the currently selected color to [Color set].

(7) Delete color

Deletes the color of the tile currently selected on the [Color set].

[Edit color set] Dialog Box

(1) List of created color sets

Displays the list of color sets.

Memo **Double clicking on the name of a displayed color set allows you to rename it.**

(2) Add new settings

Creates a new color set.

(3) Add default settings

Creates a new color set with the same content as the Manga Studio 5.0 [Standard color set].

(4) Duplicate current settings

Copies the color set currently selected in the [List of created color sets].

(5) Delete

Deletes the color set currently selected in the [List of created color sets].

(6) Change name of setting

Renames the color set currently selected in the [List of created color sets].

Memo **You can also rename by double clicking the color set currently selected in the [List of created color sets].**

(7) Up

Moves up the display order of the color set currently selected in the [List of created color sets] by one position.

(8) Down

Moves down the display order of the color set currently selected in the [List of created color sets] by one position.

Color set Palette Menu

The following describes the functions included in the menu that displays when you click [Palette menu] on the upper left corner of the [Color set] palette.

Edit color set

Clicking this item opens the [Edit color set] dialog box. The [Edit color set] dialog box allows you to add, select, edit and delete colors in the color set.

Memo **For details on the [Edit color set] dialog box, see "[Edit color set] Dialog Box" .**

Switch color set

Allows you to switch the [Color set].

Import color set

Imports a saved color set file (extension: cls) or a color palette data in Adobe Photoshop color swatch format (extension: aco) to the [List of created Color sets] on the [Color set] palette.

Memo **You can also import a color set by dragging and dropping a color set file to the [Color set] palette.**

Export color set

Exports (saves) the currently displayed [Color set] as a color set file (extension: cls) or color palette data in Adobe Photoshop color swatch format (extension: aco).

Register color set as material

Displays the [Material property] dialog box where you can register the selected color set in a [Material] palette.

[Material property] Dialog Box

(1) Material name

Input a name for the material.

(2) Location to save material

Click a folder to specify the location to save the material. The specified location is reflected in the [Tree view] of the [Material] palette.

(3) Search tag

Click the tag list to specify the search tag to be displayed on the [Tag list].

Clicking the tag with a + sign in the lower right will allow you to create a new tag.

Replace color

Changes the color of the tile currently selected on the [Color set] with the current drawing color.

Add color

Adds the currently selected color to [Color set].

Delete color

Deletes the color of the tile currently selected on the [Color set].

Auto-register color in eye dropper

Turning on this menu item allows you to automatically register a color acquired with the [Eye dropper] tool in the [Color set] palette.

How to show

Allows you to specify how to display the color tiles.

(1) Size (ex-small/small/medium/large/ex-large)

Specifies the tile size. You can select a size from [ex-small], [small], [medium], [large] and [ex-large].

(2) Step (8/16/24)

Specifies the number of tiles per row. Always displays the number of tiles specified by [Step] relative to the palette width. If the palette width is changed, the tile size changes in conjunction with the palette width.

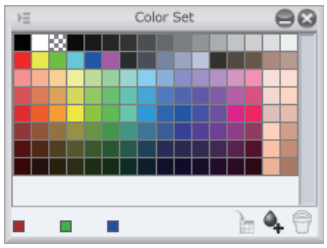
(3) List (small/medimum/large)

Displays the color set as a list of color tiles and color names. You can select a size for the view from [List small], [List medium] and [List large].

Double clicking the field on the right side of the color tile allows you to input a name for the color.

Show color set bar

When turned on, displays the color set bar of the [Color set] palette.

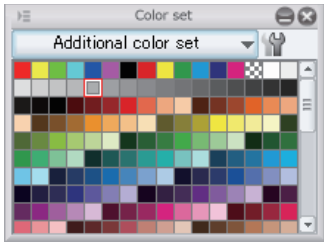


Show color set bar: OFF

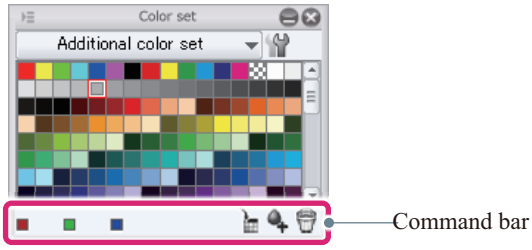
Show color set bar: ON

Show command bar

When turned on, displays the command bar of the [Color set] palette.



Show command bar: OFF



Show command bar: ON

Hide color set palette

Hides the [Color set] palette.

Memo

To display again a palette you have hidden, select the palette to display from the [Window] menu.

Intermediate color Palette

The [Intermediate color] palette displays when [Window] menu → [Intermediate Color] is selected.

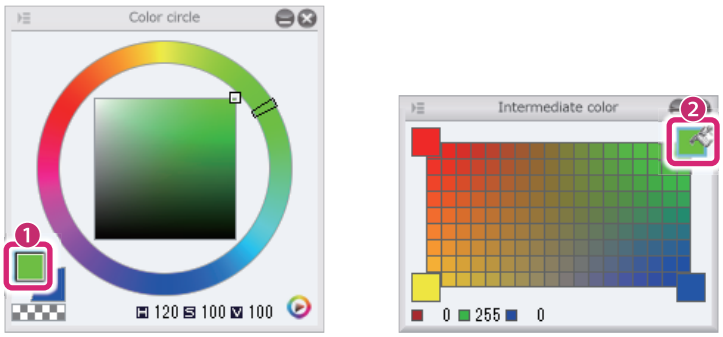
The [Intermediate color] palette allows you to select an intermediate color with respect to reference colors configured in the four corners.

Selecting a Color from the Intermediate color Palette

To select a color from the [Intermediate color] palette, proceed as follows.

1 Configure the reference colors

Configure the reference colors to the tiles located at the four corners of the [Intermediate color] palette.



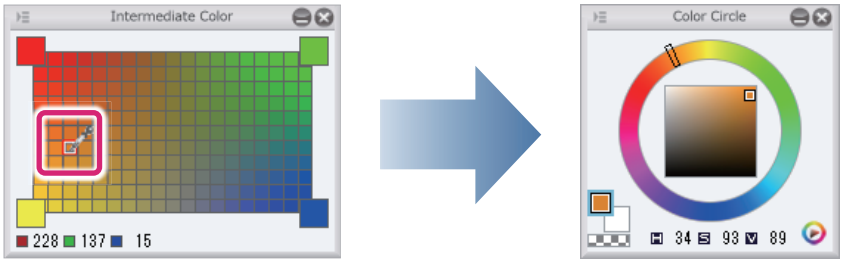
(1) Select drawing colors to configure as reference colors from other color palettes.

(2) Click the tile at a corner of the [Intermediate color] palette. The drawing color is reflected in the tile and becomes a reference color.

2 Select the color

Select a color from the [Intermediate color] palette.

Between the tiles at the corners, there are a series of tiles of gradually changing colors. The clicked color is selected as the drawing color.



Memo **The RGB value of the drawing color is displayed numerically in the lower part of the palette. Clicking the RGB value changes the indication to HSV value.**

Intermediate color Palette Menu

The following describes the functions included in the menu that displays when you click [Palette menu] on the upper left corner of the [Intermediate color] palette.

Fix number of steps(division into 10/20/30 parts)

Specifies the color tile view by the number of tiles per row. You can select the number of tiles comprising the view from [division into 10 parts], [division into 20 parts] and [division into 30 parts]. If the palette width is changed, the tile size changes in conjunction with the palette width.

Fixed width of tile (7pt/10pt/15pt)

Specifies the color tile view by the width of each tile. You can select a size from [7pt], [10pt] and [15pt]. If the palette width is changed, the number of tiles per row changes in conjunction with the palette width.

Show grid

When turned on, a border is displayed around each color tile.

Hide intermediate color palette

Hides the [Intermediate color] palette.

Approximate color palette

The [Approximate color] palette displays when [Window] menu → [Approximate Color] is selected.

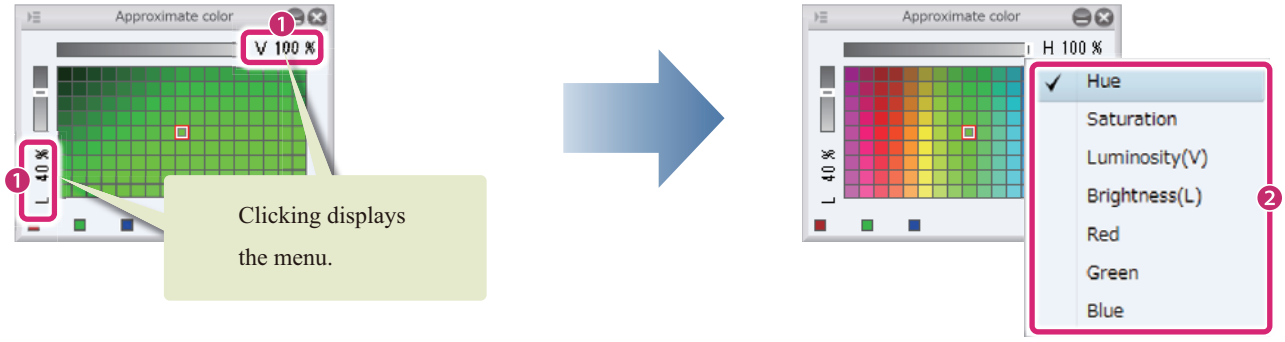
The [Approximate color] palette allows you to select a color proximate to a selected drawing color.

Selecting a Color from the Approximate color Palette

To select a color from the [Approximate color] palette, proceed as follows.

1 Select the reference element

Configure the elements to refer to the vertical/horizontal axis of the [Approximate color] palette.



(1) Click the character string by the sliders to display the menu.

(2) Select the reference element from the displayed menu.

(3) Configure the reference element for each axis by performing steps (1) and (2) for the vertical and horizontal axes.

Memo

The items you can configure as reference elements are as follows.

- **Hue (H)**
- **Saturation (S)**
- **Value (V)**
- **Luminance (L)**
- **Red (R)**
- **Green (G)**
- **Blue (B)**

2 Select the color

Select a color from the [Approximate color] palette.

(1) The drawing color selected by using another color palette is displayed in the center of the [Approximate color] palette as reference color.

(2) Move the sliders to adjust the change in color.

(3) Click a color tile to select a color.

(4) The selected color is configured as drawing color.

Memo

The RGB value of the drawing color is displayed numerically in the lower part of the palette. Clicking the RGB value changes the indication to HSV value.

Approximate color Palette Menu

The following describes the functions included in the menu that displays when you click [Palette menu] on the upper left corner of the [Approximate color] palette.

Fix number of steps(division into 10/20/30)

Specifies the color tile view by the number of tiles per row. You can select the number of tiles comprising the view from [division into 10 parts], [division into 20 parts] and [division into 30 parts]. If the palette width is changed, the tile size changes in conjunction with the palette width.

Fix width of tile (7pt/10pt/15pt)

Specifies the color tile view by the width of each tile. You can select a size from [7pt], [10pt] and [15pt]. If the palette width is changed, the number of tiles per row changes in conjunction with the palette width.

Show grid

When turned on, a border is displayed around each color tile.

Hide Approximate color palette

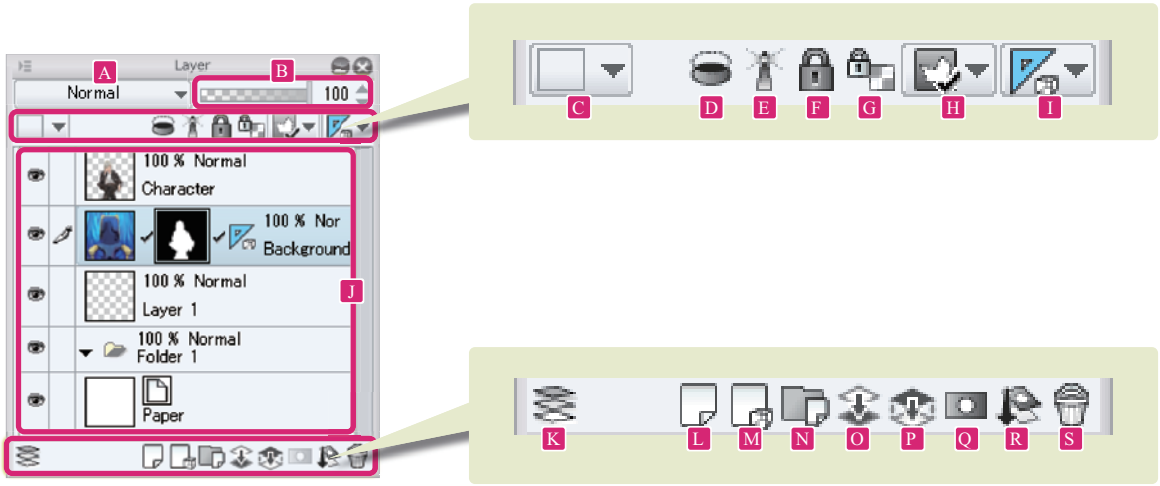
Hides the [Approximate color] palette.

Layer Palette

Layers are managed with the [Layer] palette, which allows you to change the stacking order of layers, their opacity, and the like.
The [Layer] palette displays when [Window] menu → [Layer] is selected.

Functions of Layer Palette

This section describes the functions of the [Layer] palette.



A. Combine mode

This menu allows you to specify the combine mode between layers.

Memo **For details on combine mode, see "Configuring the Combine mode" .**

B. Opacity

Adjusts the opacity of the image on the selected layer. The smaller the value, the more transparent will be the image.

C. Change palette color

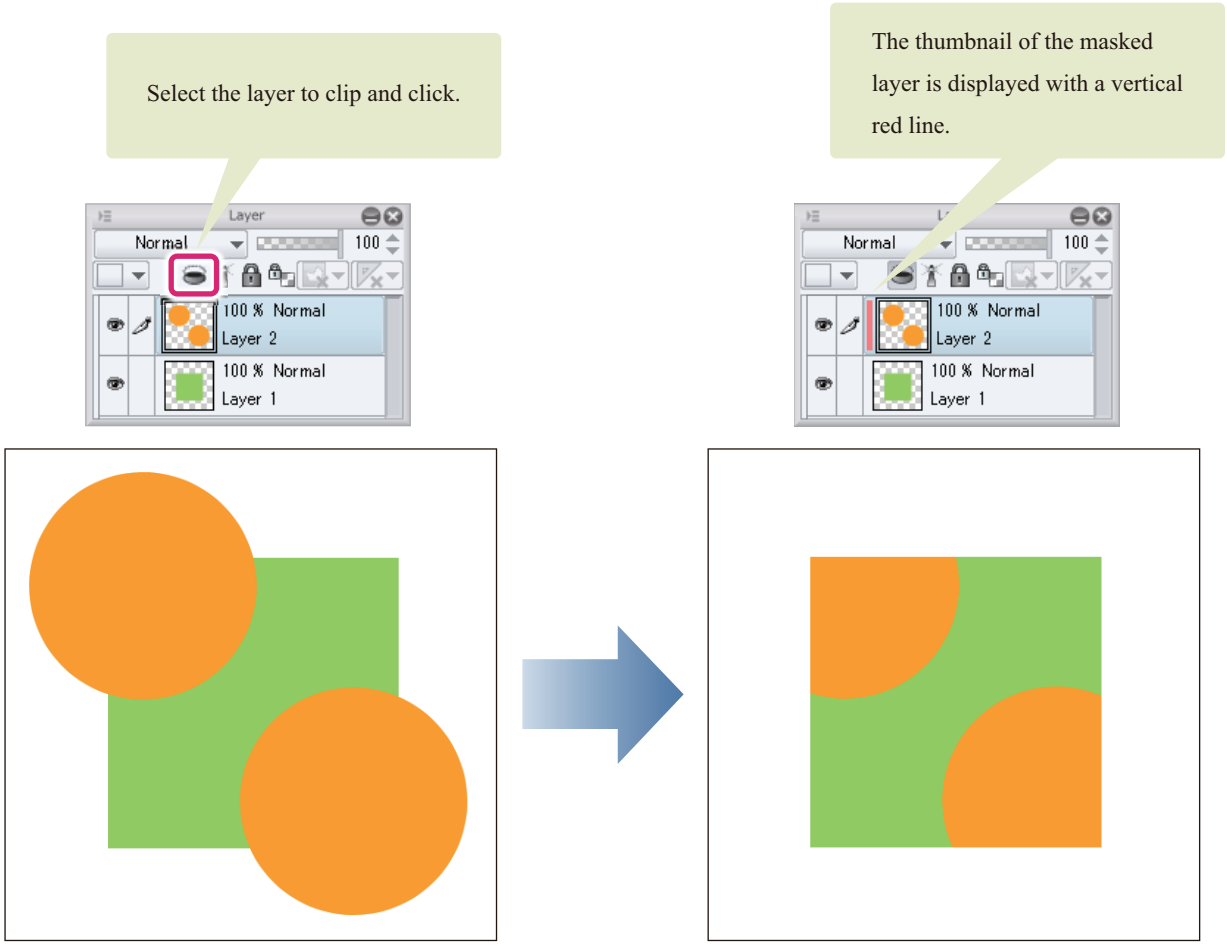
Adds a color mark to the layer selected on the [Layer] palette. Select a color from the pull down menu.

Selecting [Use other colors...] displays the dialog box for selecting a color.

Memo **Selecting multiple layers allows you to change the palette color in one go.**

D. Clip at layer below

Limits the area of the selected layer to display by referring to the layer immediately below.



E. Set as reference layer

Configures the layer selected on the [Layer] palette as [Reference layer].

Memo

- **For details on the [Reference] layer, see "Set as reference layer" .**
- **Clicking [Set as reference layer] again turns off the setting, canceling its designation as [Reference] layer.**
- **A [Reference] layer may comprise multiple layers.**
- **A [Layer Folder] can also be configured as [Reference] layer.**

F. Lock layer

Locks a layer to make layer settings unchangeable. Clicking toggles the lock on and off.

G. Lock transparent pixel

Locks drawings to transparent areas of a [Raster] layer. Allows you to draw on already drawn areas without running over to transparent areas. Clicking toggles the lock on and off.

H. Enable mask

Allows you to enable/disable the mask as well as visualize the masked area.

(1) Enable mask

When turned on, the layer mask is enabled.

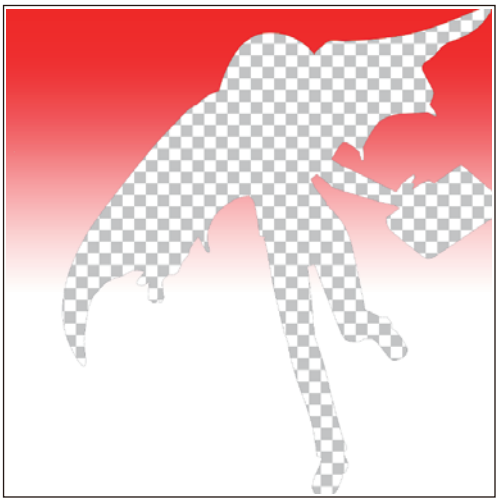
When turned off, the layer mask is disabled. When the layer mask is disabled, the mask layer icon on the [Layer] palette is displayed with a red x mark on it.

Memo

- **When a [Frame border folder] is selected, the enabled/disabled mask function is that of the [Frame border folder].**
- **You can also enable/disable the layer mask by clicking the layer mask icon while holding down the [Shift] key.**

(2) Show mask area

When turned on, displays the masked area in violet.



Show mask area: OFF

Show mask area: ON

Memo

You can also display/hide the mask by clicking the layer mask icon while holding down the [Alt] key.

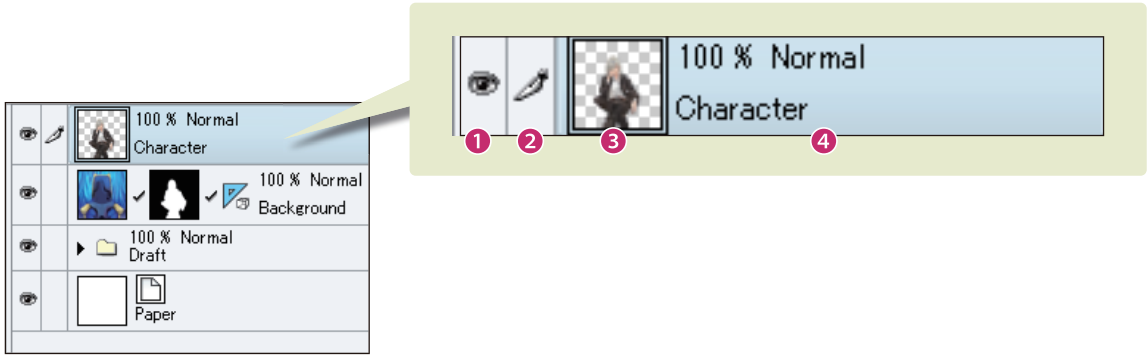
I. Set showing area of ruler

Configures the layer area where snap to ruler will be enabled.

Show in all layers	All [Raster] layers, [Vector] layers, [Selection] layers, [Quick mask] layers and [Balloon] layers are configured as snap range.
Show in same folder	All [Raster] layers, [Vector] layers, [Selection] layers, [Quick mask] layers and [Balloon] layers within the same layer folder are configured as snap range. When there is no layer folder, this becomes the same as [Show in all layers].
Show only when editing target	The snap range is limited to the currently configured layer.

J. Layer list

Displays a list of layers.



(1) Show/hide layer

Clicking this icon toggles the layer between display and hide. When an eye icon is displayed, the images on the layer are visible.

Memo

- **Right clicking [Show/hide layer] displays a menu that toggles the layer display status. For details, see "Show/hide layer Toggle Menu" .**
- **Clicking [Show/hide layer] while holding down the [Alt] key makes visible the clicked layer only. Clicking [Show/hide layer] again while holding down the [Alt] key restores the previous display status.**

(2) Layer drawing allowed/not allowed

The layer being edited is displayed with a pen icon.

When multiple layers are selected, layers other than that being edited are displayed with a check mark. Clicking [Layer drawing allowed/not allowed] again cancels the selection status.

Memo

- **To select multiple layers, click the layers while holding down the [Ctrl] key.**
- **To select a group of consecutive layers, click the layers while holding the down [Shift] key.**

(3) Layer icon

Previews the drawing on the layer with an icon.

Memo

Clicking the layer icon while holding down the [Ctrl] key allows you to create a selection area from the drawing on the clicked layer.

(4) Layer name field

Displays layer information such as opacity, combine mode and name.

Clicking the field selects the layer, becoming the layer being edited (target of edit). The selected layer is displayed in light blue. Double clicking the field allows you rename the layer.

Placing the mouse cursor over this area and dragging up/down allows you to change the order in which the layer is stacked. When multiple layers are selected, all selected layers become the target of stacking order change.

K. Show layers in 2 panes

Divides the layer palette view in two.

Memo

This is convenient to display distant layers separately when there are many layers.

L. New raster layer

Creates a new [Raster] layer above the currently selected layer.

Memo

- **Clicking [New raster layer] creates a raster layer whose expression color is [Color].**
- **Clicking [New raster layer] while holding down the [Alt] key opens the [New raster layer] dialog box. The dialog box allows you to create the layer by specifying name, expression color, combine mode, and so on.**

M. New vector layer

Creates a new [Vector] layer above the currently selected layer.

Memo

- **Clicking [New vector layer] creates a vector layer whose expression color is [Color].**
- **Clicking [New vector layer] while holding down the [Alt] key opens the [New vector layer] dialog box. The dialog box allows you to create the layer by specifying name, expression color, combine mode, and so on.**

N. New layer folder

Creates a new [Layer folder].

Memo

[Layer folder] is a function to group a number of layers in one folder. For example, placing images related to the character and images related to the background in separate folders makes the management of related images easier.

O. Transfer to lower layer

Transfers the image on a selected layer to the layer immediately below.

For details, see "Menu" → "Layer Menu" → "Transfer to Lower Layer" .

P. Combine to layer below

Combines a selected layer with that immediately below to make one.

For details, see "Menu" → "Layer Menu" → "Combine to Layer below" .

Q. Create layer mask

Creates a layer mask in the selected layer. The area outside of the selected area is masked.

Memo

- **For masks created outside of the selected area, see "Mask outside selection" .**
- **Clicking [Create layer mask] while holding down the [Alt] key masks the selected area.**

R. Apply mask to layer

Selecting and clicking a layer with a layer mask applies the layer mask. Applying the mask converts the layer into a [Raster] layer.

Important

Applying layer mask converts a layer into [Raster] layer.

Memo

Layer mask can also be applied by dragging and dropping the layer to [Apply mask to layer].

S. Delete layer

Deletes the currently selected layer.

Important When a layer folder is selected, also the layers stored in the folder are deleted.

Memo Layer folders, layer masks and rulers can also be deleted with [Delete layer].

Layer Palette Menu

This section describes the functions included in the menu that displays when you click [Palette menu] on the upper left corner of the [Layer] palette.

Memo Some menu items can be run from the context menu that displays when you right click the mouse.

New raster layer

Creates a new raster layer (layer for drawing) above the selected layer.

For details, see "Menu" → "Layer Menu" → "New raster layer" .

New layer

Creates a new layer above the selected layer.

For details, see "Menu" → "Layer Menu" → "New layer" .

New correction layer

Creates a correction layer above the selected layer. This layer allows you to adjust the brightness, hue, saturation, luminosity, gradation and the like of the layers below.

For details, see "Menu" → "Layer Menu" → "New correction layer" .

New layer folder

Creates a new layer folder.

For details, see "Menu" → "Layer Menu" → "New layer folder" .

Duplicate layer

Makes a copy of the selected layer or layer folder.

For details, see "Menu" → "Layer Menu" → "Duplicate layer" .

Delete layer

Deletes the selected layer or layer folder.

Important When a layer folder is selected, also the layers stored in the folder are deleted.

Layer mask

Creates a mask for the selected layer or layer folder. Masks can be deleted as well as configured.

Mask outside selection	Masks the area outside of the selected area. For details, see "Menu" → "Layer Menu" → "Layer Mask" → "Mask outside selection" .
Mask selection	Masks the selected area. For details, see "Menu" → "Layer Menu" → "Layer Mask" → "Mask selection" .
Delete mask	Deletes the layer mask of a selected layer.
Apply mask to layer	Applies the layer mask. Applying the mask converts the layer into a [Raster] layer.
Enable mask	Turning on this item by selecting the menu enables the layer mask. For details, see "Menu" → "Layer Menu" → "Layer Mask" → "Enable mask" .
Show mask area	Turning on this item by selecting the menu displays the masked area in violet.
Link mask to layer	Turning on this item by selecting the menu links the layer and mask. When linked, the mask drawing moves along with the layer when this is moved using the [Move layer] tool. For details, see "Menu" → "Layer Menu" → "Layer Mask" → "Link mask to layer" .

Ruler - Frame

Allows you to delete and display rulers, create perspective rulers, and so on. It also allows you to configure whether to move the ruler along with the drawing area of the layer being edited, or separately. For details, see "Menu" → "Layer Menu" → "Ruler - Frame" .

Layer settings

Allows you to configure settings related to layers such as reference layer, clipping, layer lock, transparent pixel lock, and so on.

Set as reference layer	Configures a layer as [Reference] layer. With certain tools, you will be able to select and draw on the currently edited layer by referring only to this layer. For details, see "Menu" → "Layer Menu" → "Layer settings" → "Set as reference layer" .
Set as Draft Layer	Configures the layer being edited as [Draft] layer. For [Draft layers], the following settings are available when configuring as reference, or exporting files. ● Whether or not to include the [Draft] layer when exporting files with [File] menu → [Export (Single Layer)]. ● Whether or not to include the [Draft] layer when configuring print settings with [File] menu → [Print settings]. ● Whether or not to include the [Draft] layer in the layers to refer to when creating a selection, or performing a fill.
Clip at layer below	Limits the area of the selected layer to display by referring to the layer immediately below. For details, see "Menu" → "Layer Menu" → "Layer settings" → "Clip at layer below" .
Lock layer	Locks a layer to make layer settings unchangeable. Clicking toggles the lock on and off.
Lock transparent pixel	Locks drawing to transparent areas of a layer. Allows you to draw on already drawn areas without running over to transparent areas. Clicking toggles the lock on and off.
Show layer	Clicking this item toggles the selected layer between display and hide.

Change Layer Name	Allows you to rename a selected layer. For details, see "Menu" → "Layer Menu" → "Layer settings" → "Change Layer Name" .
Advanced settings	Opens the dialog box for correction if the correction layer is selected. For details on the dialog box, see "New correction layer" . Moreover, for [Fill in monochrome] layer, opens the dialog box for selecting a color.

Selection from layer

Allows you to create a selection area from a drawing on the currently edited layer. You can also add or delete a selection area to/from an already selected area. Furthermore, you can create a selection area from the area overlapping an already selected area.

For details, see "Menu" → "Layer Menu" → "Selection from layer" .

Create selection	Creates a selection area from a drawing on the currently edited layer.
Add selection	Creates a selection area from a drawing on the currently edited layer and adds it to an already selected area.
Delete selection	Creates a selection area from a drawing on the currently edited layer and removes that portion from an already selected area.
Select overlapping area	Creates a selection area from a drawing on the currently edited layer and creates another selection area only from the area overlapping with an already selected area.

Rasterize

Converts the content of a layer other than [Raster] layer into [Raster] layer.

Memo

For frame border folders, rasterization is performed by keeping the original frame folder. After rasterization, frames within the original frame border folder become hidden.

Convert layer

Converts the type of the layer selected on the [Layer] palette. You can change the type and expression color of a layer, as well as convert a drawing inside a selected area into an image material layer.

For details, see "Menu" → "Layer Menu" → "Convert layer" .

LT conversion of layer [EX] *

Allows you to separate a selected layer into outlines (line drawings) and tones and convert each of them into different layers.

For details, see "Menu" → "Layer Menu" → "LT conversion of layer [EX] *" .

Transfer to lower layer

Transfers the image on a selected layer to the layer immediately below.

For details, see "Menu" → "Layer Menu" → "Transfer to Lower Layer" .

Combine to layer below

Combines a selected layer with that immediately below to make one.

For details, see "Menu" → "Layer Menu" → "Combine to Layer below" .

Combine selected layer

Combines selected layers to make one. This is used to join images drawn separately, for example.

For details, see "Menu" → "Layer Menu" → "Combine Selected Layer" .

Combine showing layer

Combines only layers displayed on the [Layer] palette. Hidden layers are not combined and are left as they are.

For details, see "Menu" → "Layer Menu" → "Combine Showing Layer" .

Combine copies of displayed layer *

Combines the copies of visible layers. The original layers are kept as they are.

For details, see "Menu" → "Layer Menu" → "Combine copies of displayed layer *" .

Merge layers

Combines all layers into one.

For details, see "Menu" → "Layer Menu" → "Merge Layers" .

Thumbnail size

Allows you to select the size of the thumbnails to be displayed on the [Layer] palette from [None], [Smallest], [Small], [Medium] and [Large].

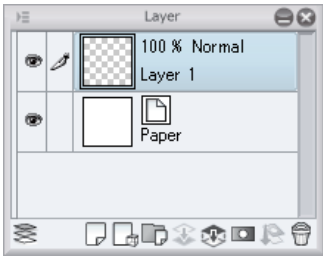
Thumbnail showing area

Allows you to select the area to be displayed in the thumbnail on the [Layer] palette.

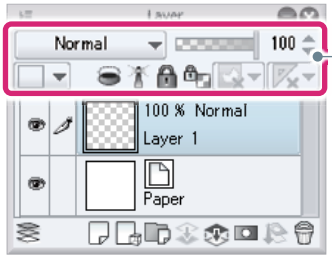
Show whole canvas	Display the entire canvas in the thumbnail.
Show only layer area	Display only the drawn area of the layer in the thumbnail.

Show property bar

When turned on, displays the property bar of the [Layer] palette.



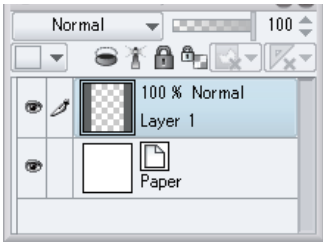
Show property bar: OFF



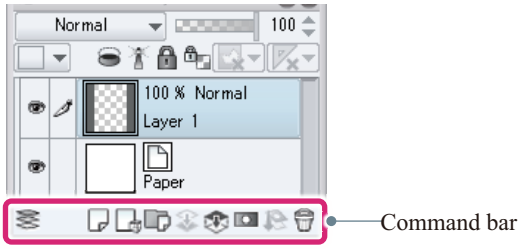
Show property bar: ON

Show command bar

When turned on, displays the command bar of the [Layer] palette.



Show command bar: OFF



Show command bar: ON

Place command bar below list

When turned on, displays the command bar of the [Layer] palette below the [Layer list].

When turned off, displays the command bar of the [Layer] palette above the [Layer list].

Hide layer palette

Hides the [Layer] palette.

Memo

To display the [Layer] palette again, select [Window] menu → [Layer].

Show/hide layer Toggle Menu

Right clicking [Show/hide layer] on the [Layer] palette displays a menu that toggles the layer visibility. The following describes the function of each menu item.

Switch show and hide of this layer

Toggles the visibility of the currently edited layer.

Show this layer including upper folder

Makes visible the layer folder and the currently edited layer within the folder.

Memo

- **This menu item is available only when the currently edited layer is selected from inside a layer folder.**
- **All upper layer folders become visible.**

Show all other layers

Makes visible all layers except the one being edited. The visibility of the layer being edited does not change.

Hide all other layers

Hides all layers except the one being edited. The visibility of the layer being edited does not change.

Hide all except selected layer

Hides all layers except the selected one. The visibility of the selected layer does not change.

Layer Operations

Layer operations are possible from the [Layer] menu and [Layer] palette.

Selecting a Layer

On the [Layer] palette, click the name of the layer you want to edit.

Creating a New Layer

To create a new layer, select [Layer] menu → [New layer]. The layer is created above the layer currently selected on the [Layer] palette.

A layer can also be created by clicking [New raster layer] on the [Layer] palette.

Deleting a Layer

On the [Layer] palette, select the layer to delete and then select, [Layer] menu → [Delete layer]. The layer is deleted from the [Layer] palette.

A layer can also be deleted by clicking the [Delete Layer] button on the [Layer] palette, or by dragging and dropping the layer to the button.

Changing the Stacking Order of a Layer

The order in which layers are stacked can be changed by dragging and dropping.

Memo

The stacking order of layer folders can also be changed in the same way as layers.

1 Select the layer

On the [Layer] palette, select the layer whose stacking order you want to change.

Memo

- **To select multiple layers, click the layers while holding the [Ctrl] key down.**
- **To select a group of consecutive layers, click the layers while holding the [Shift] key down.**

2 Change the stacking order of the layer

Drag and drop the palette to the desired position. A red line is displayed in the new position.

3 The stacking order change is complete

The layer moves to the dragged and dropped position.

Erasing a Drawing From a Layer

On the [Layer] palette, select the layer whose content you want to delete and then select, [Layer] menu → [Erase]. The content drawn on the layer is erased leaving the layer on the [Layer] palette.

Switching Show/Hide for a Layer

On the [Layer] palette, click [Show/hide palette] for the layer whose visibility you want to change.

Memo

Right clicking [Show/hide layer] displays the menu to toggle the layer visibility. For details, see "Show/hide layer Toggle Menu" .

Displaying a Layer Individually

Clicking [Show/hide layer] while holding down the [Alt] key makes visible only the clicked layer.
Clicking [Show/hide layer] again while holding down the [Alt] key restores the previous visibility status.

Configuring the Opacity of a Layer

The slider on the upper part of the [Layer] palette allows you to specify the opacity for the selected layer. Moving the slider to the right increases the opacity of the layer.

Displaying a Checkered Pattern in Transparent Areas

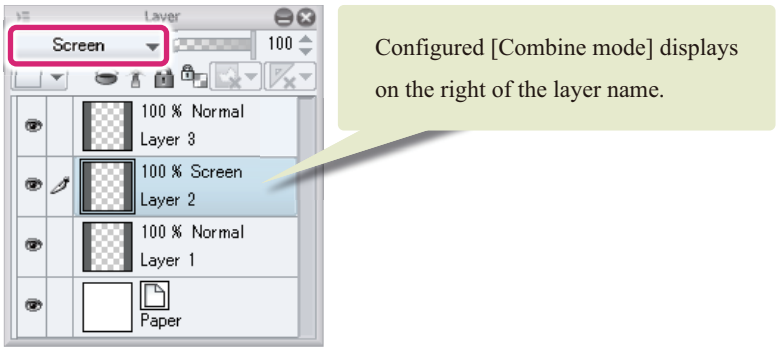
When Hide is selected for [Show/Hide layer] of the [Paper] layer, the transparent area is displayed in checkered pattern.

Memo

The colors of the checkered pattern can be changed on the [Preferences] dialog box. For details, see "Menu" → "File Menu" → "Preferences [Windows]" → "Canvas" .

Configuring the Combine mode

The mode to combine layers is specified from the menu.



Normal	The colors used in the layer below are combined with those on the layer being configured as they are.
Darken	Compares the drawing colors used in the lower layer with those used in the upper layer and combines the colors in the lower layer with the darker one.
Multiply	The colors used in the layer below are multiplied with those on the layer being configured. After combine, the colors are darker than the originals.
Color burn	Produces an effect similar to the "burn" in silver halide photography. The colors used in image on the layer below are darkened to increase contrast, and then combined with the colors used on the layer being configured.
Linear burn	The colors in the layer below are first darken, and then combined with the colors in the layer being configured.
Subtract	The colors used in the layer below and those in the layer being configured are subtracted. After combine, the colors are darker than the originals.
Lighten	Compares the drawing colors used in the lower layer with those used in the upper layer and combines the colors in the lower layer with the brighter one.
Screen	The colors used in the layer below are inverted and then multiplied with those on the layer being configured. After combine, the colors are brighter than the originals.

Color dodge	As with "dodge" in silver halide photography, the colors used in the lower layer becomes brighter and the contrast, lower.
Glow dodge	Produces stronger effect on semi-transparent areas than [Color dodge].
Add	The colors used in the layer below are added with those on the layer being configured. After combine, the colors are brighter than the originals.
Add (Glow)	Produces stronger effect on semi-transparent areas than [Add].
Overlay	Combines by applying [Multiply] or [Screen] depending on the overlapped colors. After combine, bright areas are brighter and dark areas, darker.
Soft light	Produces different results depending on the density of the overlapped colors. When colors brighter than 50% grayscale are overlapped, the result is brighter than the originals, as in dodge. When colors darker than 50% grayscale are overlapped, the result is darker than the originals, as in burn. When 50% grayscale colors are overlapped, the lower layer remains unchanged, as before the overlap. Areas not overlapping with colored areas become white.
Hard light	Produces different results depending on the density of the overlapped colors. When colors brighter than 50% grayscale are overlapped, the result is brighter than the originals, as with [Screen]. When colors darker than 50% grayscale are overlapped, the result is darker than the originals, as with [Multiply]. When 50% grayscale colors are overlapped, the lower layer remains unchanged, as before the overlap. Areas not overlapping with colored areas become white if a color brighter than 50% grayscale is selected, and the selected color if a color darker than 50% grayscale is selected.
Difference	Subtracts the drawing colors used in the lower layer with those used in the layer being configured and combines the colors in the lower layer with the absolute value of the difference.
Through	Applies the effects and layer combine modes of the correction layers stored in the layer folder also to layers outside the layer folder. [Through] is available only when a layer folder is selected.

Layer property palette

The [Layer property] palette allows you to configure a variety of layer settings.
It can also be used to display and switch tools and sub tools available for use in the selected layer.
The [Layer property] palette displays when [Window] menu → [Layer property] is selected.

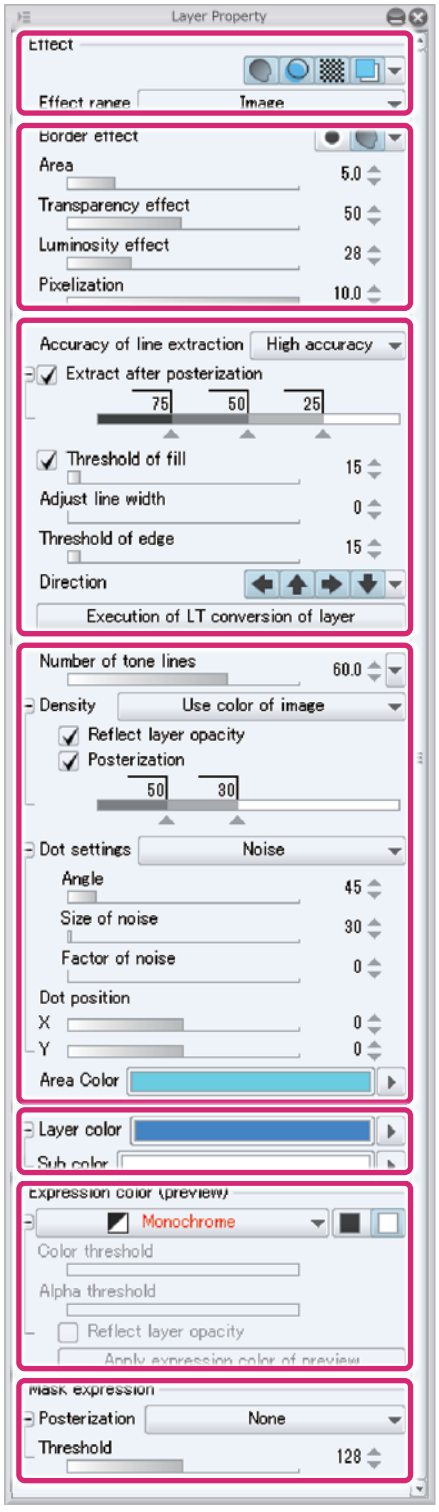
Functions of Layer property Palette

This section describes the functions of the [Layer property] palette. Settings available on the [Layer property] palette vary depending on the selected layer type. See the corresponding section based on the table below.

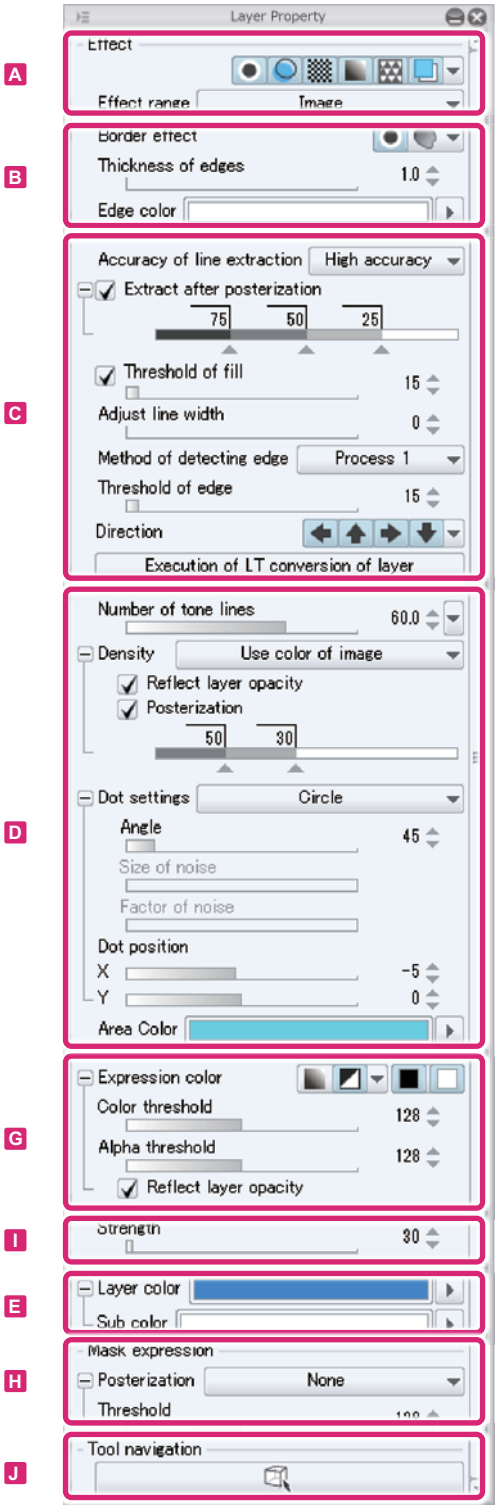
Selection layer	See "When a Selection Layer, Quick mask or Paper Layer Is Selected" .
Quick mask	See "When a Selection Layer, Quick mask or Paper Layer Is Selected" .
Paper layer	See "When a Selection Layer, Quick mask or Paper Layer Is Selected" .
Frame border folder	See "When Frame Border Folder Is Selected" .
Correction layer	See "When Correction Layer Is Selected" .
Other layers	See "Functions of Layer property Palette (Standard)" .

Functions of Layer property Palette (Standard)

This section describes the functions of the standard [Layer property] palette.



For [Raster] layer



For [Image material] layer

Important

Displayed items may vary depending on the selected layer. Furthermore, displayed items may also vary depending on the configured settings.

A. Effect

Configures the type of effect to apply to the layer and the area where the effect applies.

(1) Effect

Clicking each of the buttons toggles on and off the effects of [Border effect], [Extract line], [Tone], [Display decrease color], [Texture combine] and [Layer color].

When turned on, the related items display on the [Layer property] palette. In [Effect], you may select multiple items simultaneously.

Border effect	Allows you to configure effects to be applied to the drawings and border (perimeter) of materials on the layer. Two types of effects are available: [Edge] and [Border of watercolor]. This item is not displayed when [Gradient] layer or [Fill in monochrome] layer is selected.
Extract line [EX]	An effect that extracts line drawings from a layer to display. This item does not display when a [Gradient] layer, [Fill in monochrome] layer, or [Layer folder] is selected.
Tone	An effect that displays images on a layer with black and white halftone dots (toning).
Display decrease color	Reduces the colors of a layer to [Monochrome] or [Gray]. This item displays only when a [Image material] layer or [3D] layer is selected. When turned off, the original expression color(s) is(are) restored.
Texture combine	Displays when an [Image material] layer other than [Vector image material] layer is selected. This is an effect where images on an [Image material] layer are displayed as texture.
Layer color	The color of the drawing on the layer can be changed arbitrarily. For layers whose [Expression color] is [Monochrome] or [Gray], the black [Drawing color] becomes [Main color] and the white [Drawing color] becomes [Sub color] for display. For layers whose [Expression color] is [Color], the colors are first converted into grayscale by the application and then changed to alternative colors.

(2) Effect area

For layers that has a [layer mask], configure the area where the effect applies.

This item displays when [Border effect], [Extract line] or [Tone] is selected for [Effect] and the selected layer has [layer mask].

Image	Applies the effect to all images inside the selected layer.
Mask image	Applies the effect to images on the selected layer after masking.

B. Border effect

Turning on [Border effect] for [Effect] displays the items below.

Memo **[Border effect] does not display when a [Gradient] layer or [Fill in monochrome] layer is selected.**

(1) Border effect

Select the effect to apply to the drawings and border (perimeter) of materials on the layer. [Border effect] settings to configure vary depending on the selected item.

Original image

Edge

Border of watercolor

Edge	Allows you to configure a monochrome edge for the outer side of drawings and border of materials.
Border of watercolor	Allows you to configure a pale, subtle edge, as drawn with watercolor, for the outer side of drawings and border of materials.

In the case of Edge

Configure the following items.

(2) Thickness of edges

Configure the thickness of the edges with the slider.

(3) Edge color

Configure the color of the edges. Clicking the color indicator configures the selected drawing color. Clicking the [▼] icon displays the dialog box for selecting a color.

In the case of Border of watercolor

Configure the following items.

(4) Area

Configure the area where you want to apply edge to the border of drawings. The larger the value, the wider will be displayed the border edge.

(5) Transparency effect

Configure the opacity of the border area. The larger the value, the more opaque will be displayed the border area.

(6) Luminosity effect

Configure how dark to make the border area. The larger the value the darker will be displayed the border area.

(7) Blurring Width

Configure how blurred to make the border area. The larger the value, the more blurred will be displayed the border area.

C. Extract line [EX]

Selecting [Extract line] for [Effect] displays the items below.

Memo

- **[Extract line] does not display when a [Gradient] layer, [Fill in monochrome] layer, or [Layer folder] is selected.**
- **Some of the items may not display depending on the selected layer.**

(1) Accuracy of line extraction

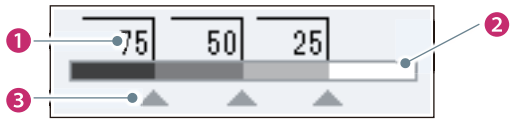
Configure the accuracy with which to extract the line drawing. Select one from: [Fast], [High accuracy] and [Highest accuracy]. The higher the accuracy, the better will be the quality of the displayed line drawing.

(2) Extract after posterization

When turned on, the original layer is posterized before the line drawing is extracted. The gradation can be adjusted using [Posterization control].

Posterization control

Adjust the grayscale gradation to extract as line drawing.



(1) Density	Shows the grayscale value. Clicking the numeric value allows you to change it directly.
(2) Preview	Previews the posterization.
(3) Node	A controller to adjust the grayscale gradation. ● Dragging the node horizontally allows you to adjust the gradation range reflecting the density. ● Dragging a node out of the [Posterization control] allows you to remove it. ● Clicking where there is none allows you to add a one.

(3) Threshold of fill

Allows you to configure the area to be filled in black. You can configure the threshold using a slider.

(4) Adjust line width

Allows you to adjust the width of the line drawing using a slider.

(5) Threshold of edge

Configure the grayscale threshold to extract as line drawing. The smaller the value, the more lines will be detected as the area regarded as line drawing becomes wider.

(6) Direction

Specify the direction in which to detect the line drawing. The capability to detect line drawings becomes poorer in the opposite direction.

(7) Execution of LT conversion of layer

Displays the [LT conversion of layer] dialog box.

Allows you to convert the selected layer by separating it into outline (line drawing) and tone layers, while inheriting the [Extract line] and [Tone] settings of the [Layer property] palette.

Memo

Items displayed on the [LT conversion of layer] dialog box vary depending on whether the selected layer is a 3D layer or not. For details on the [LT conversion of layer], see the following:

- **"[LT conversion of layer] Dialog Box (3D Layer)"**
- **"[LT conversion of layer] Dialog Box (Except 3D Layer)"**

When the Selected Layer Is an Image Material Layer

The following additional items are displayed when the selected layer is an [Image material] layer:

(8) Method of detecting edge

Allows you to select the method for detecting line drawings from the [Image material] layer. The items to configure vary depending on the selected method.

Process 1	Configure settings in the same way as for other layers.
Process 2	Settings to be configured differ from those for other layers. Select this method to extract more delicate line drawings than with [Process 1].

(9) Threshold of edge height

Allows you to adjust the height of the edge to detect as line drawing. The smaller the value, the less strict will be the edge, making even small changes to be detected as line.

(10) Threshold of gradient variation

Adjusts the continuity of the detected line drawing based on the variation in the thickness of the line drawing. The larger the value, the more likely to make segments short.

D. Tone

Turning on [Tone] for [Effect] displays the following items.

(1) Number of tone lines

Specify the number of tone (halftone dot) lines. The larger the value, the smaller will be the halftone dot.

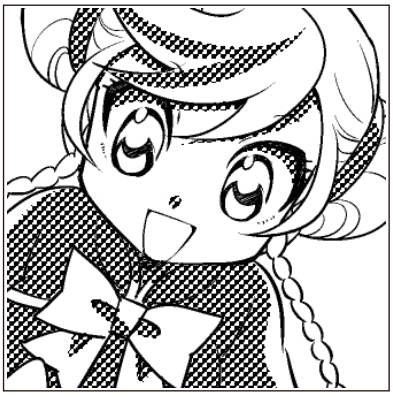
(2) Density

Configure the method for specifying the tone density.

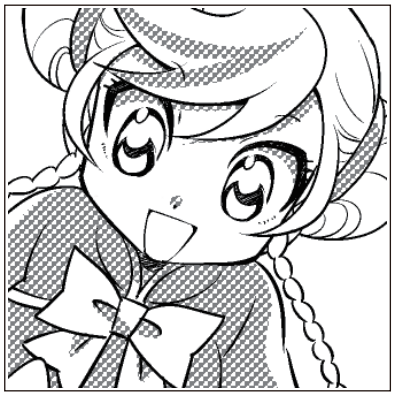
Use color of image	Configures the tone density based on the image color.
Use brightness of image	Configures the tone density based on the image brightness.
Use specified density	This item is displayed when a [Fill in monochrome] layer is selected. Specifying this item allows you to configure the tone density with the slider under this item.

(3) Reflect layer opacity

When turned on, the opacity of the layer is reflected in the size of the halftone dots at toning.

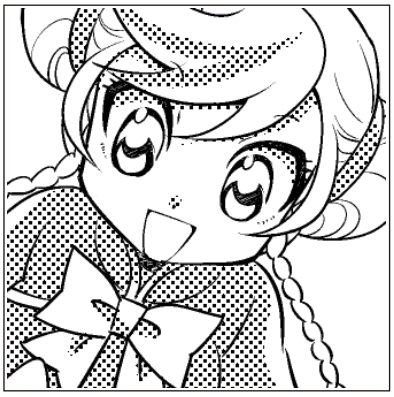


Original image



[Reflect layer opacity]: OFF
(50% layer opacity)

The color of the halftone dots becomes lighter.



[Reflect layer opacity]: ON
(50% layer opacity)

The opacity is reflected in the size of the halftone dots.

Memo

When [Reflect layer opacity] is turned on, the density of the halftone dots does not change even if the layer opacity is changed, which will allow you to avoid moire from occurring when outputting in black and white, for example.

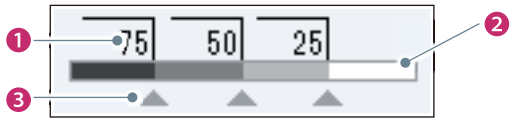
(4) Posterization

When turned on, allows you to adjust the density of the tone using [Posterization control].

Memo **This item does not display when a [Fill in monochrome] layer is selected.**

Posterization control

Adjust the density of the tone.



(1) Density	Shows the density of the tone numerically. Clicking the numeric value allows you to change it directly.
(2) Preview	Previews the posterization.
(3) Node	A controller to adjust the gradation of the tone density. ● Dragging the node horizontally allows you to adjust the gradation range reflecting the density of the tone. ● Dragging a node out of the [Posterization control] allows you to remove it. ● Clicking where there is none allows you to add a one.

(5) Dot settings

Select the shape of the tone.

(6) Angle

Configure the angle of the tone (halftone dot).

(7) Size of noise

Configure the noise size. You can configure this item when [noise] is selected for [Dot settings].

(8) Factor of noise

Configure the noise factor. You can configure this item when [noise] is selected for [Dot settings].

(9) Dot position (X)

Moves the tone (halftone dot) pattern in the horizontal direction.

(10) Dot position (Y)

Moves the tone (halftone dot) pattern in the vertical direction.

(11) Area Color

If [Change Display Of Tone Area] is enabled, you can configure the expression colors of the areas with tone attached and areas with image materials attached. Clicking the color indicator configures the selected drawing color. Clicking the [▼] icon displays the dialog box for selecting a color. Configuring a color changes the color of the tone areas to the configured color.

Memo **[Area expression color] is displayed if any of the items in [View] menu → [Change display of Tone Area] is enabled.**
For details on [Change display of Tone Area], see "Change Display Of Tone Area" .

E. Layer color

Turning on [Layer color] for [Effect] displays the following items.

(1) Layer color

Allows you to specify an alternative color to black. Clicking the color indicator configures the selected drawing color. Clicking the [▼] icon displays the dialog box for selecting a color. Configuring a color changes black to the configured color.

(2) Sub color

Allows you to specify an alternative color to white. Clicking the color indicator configures the selected drawing color. Clicking the [▼] icon displays the dialog box for selecting a color. Configuring a color changes white to the configured color. This item does not display when the selected layer is monochrome.

F. Expression color

Allows you to configure [Expression color] for the layer by previewing it. This item displays when a [Raster] layer, [Vector] layer, [Balloon] layer or [Text] layer is selected. Clicking [Apply expression color of preview] commits the [Expression color] for the layer.

Displayed items vary depending on the selected layer and configured [Expression color].

(1) Expression color

Changes the expression color of the selected layer. Select from [Color], [Gray] and [Monochrome].

When reducing colors degrades the image quality, the view changes to [Expression color (preview)], where the image is displayed in reduced colors but in the original expression color.

Memo **For details on [Expression color], see "Explanation: Expression Color and Drawing Color" .**

Color

Gray

Monochrome

(2) Drawing color

Configures the drawing color for [Gray] and [Monochrome]. Configure the color with the [Black] and [White] buttons.

Memo **[Drawing color] displays when [Expression color] is [Gray] or [Monochrome].**

Gray

The drawing color is configured as follows with the [Black] and [White] buttons.

Only black button ON	The drawing color is configured as a 256-step gradation from black to transparent.
Only white button ON	The drawing color is configured as a 256-step gradation from white to transparent.
Both black and white buttons ON	The drawing color is configured as a 256-step gradation from black to white. When drawn in transparent, the drawn portion is erased.

Monochrome

The drawing color is configured as follows with the [Black] and [White] buttons.

Only black button ON	The drawing color is configured as black or transparent.
Only white button ON	The drawing color is configured as white or transparent.
Both black and white buttons ON	The drawing color is configured as black, white or transparent.

(3) Color threshold

The color threshold configured with the slider becomes the border between black and white.

This item displays when a [Raster] layer meeting the following conditions is selected, and [Monochrome] is configured for [Expression color] on the [Layer property] palette.

- [Expression color] is [Color]
- [Expression color] is [Gray] and the [Drawing color] is [Black] and [White]

Memo **This item does not display if drawings on the layer are monochrome, even if the [Expression color] of the [Raster] layer is [Color] or [Gray].**

(4) Alpha threshold

The alpha threshold for opacity configured with the slider becomes the border between black and white and transparent. This item displays when a [Raster] layer is selected, and [Monochrome] is configured for [Expression color] on the [Layer property] palette.

(5) Reflect layer opacity

Reflects the layer opacity in the density. This item displays when a [Raster] layer is selected, and [Monochrome] is configured for [Expression color] on the [Layer property] palette.

On	Divides the [Drawing color] into black and white and transparent based on the drawing color with layer opacity applied.
Off	Applies opacity to a layer whose [Expression color] has been changed to monochrome.

Memo **This item does not display if drawings on the layer are monochrome, even if the [Expression color] of the [Raster] layer is [Color] or [Gray].**

(6) Apply expression color of preview

Clicking the button converts the layer into the [Expression color] and [Drawing color] configured on the [Layer property] palette. At the same time, the [Expression color] and [Drawing color] settings prior to configuring them on the [Layer property] palette are discarded.

For example, if [Monochrome] is configured for [Expression color] on the layer palette for a [Raster] layer whose [Expression color] is [Color] and the [Apply expression color of preview] button clicked, the [Raster] layer is converted to a layer whose [Expression color] is [Monochrome].

G. Display decrease color

Turning on [Display decrease color] for [Effect] displays the following items.

Memo

- **[Display decrease color] displays when a [Image material] layer or [3D] layer is selected.**
- **If items for [Display decrease color] are configured, the preview is displayed in [Gray] or [Monochrome], without changing the original expression color.**

(1) Expression color

Configures the [Expression color] applicable when [Display decrease color] is turned on for the selected layer. Select from [Gray] and [Monochrome].

(2) Drawing color

Configures the drawing color applicable when [Expression color] is [Gray] or [Monochrome] for [Display decrease color]. Configure the color with the [Black] and [White] buttons.

(3) Color threshold

The color threshold configured with the slider becomes the border between black and white.

This item displays when the configured [Expression color] is [Monochrome] for [Display decrease color] and:

- The [Expression color] is [Color] for the layer when [Display decrease color] is turned off, or
- The [Expression color] is [Gray] and [Drawing color] is [Black] and [White] for the layer when [Display decrease color] is turned off

(4) Alpha threshold

The alpha threshold for opacity configured with the slider becomes the border between black and white and transparent. This item displays when the configured [Expression color] is [Monochrome] for [Display decrease color].

(5) Reflect layer opacity

Reflects the layer opacity in the density. This item displays when the [Expression color] for [Display decrease color] is changed to [Monochrome].

On	Divides the [Drawing color] into black and white and transparent based on the drawing color applied with the layer opacity.
Off	Applies opacity to a layer whose [Expression color] has been changed to monochrome.

H. Mask expression

This item displays when a layer including a mask is selected, and [Monochrome] is configured for [Expression color] on the [Layer property] palette. Allows you to configure a gradation for the mask.

(1) Posterization

Select posterization for the mask from [Yes] and [No]. Selecting [Yes] keeps the existing gradation. Selecting [No] binarizes the mask gradation.

(2) Threshold

This item displays when [No] is configured for [Posterization]. The color threshold configured with the slider becomes the border to divide the layer mask colors into [Black] and [Transparent].

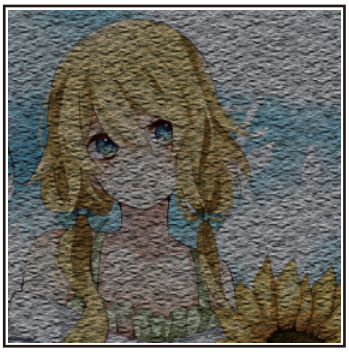
I. Texture combine

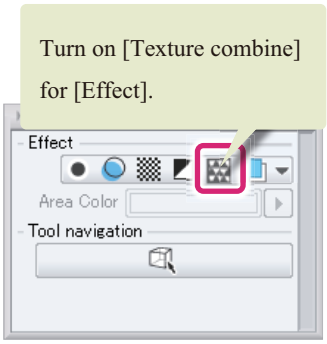
Turning on [Texture combine] for [Effect] displays the following items.

Memo **[Texture combine] displays when an [Image material] layer other than vector is selected.**

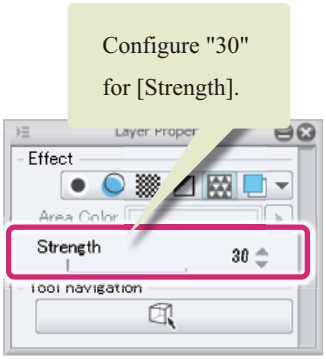
(1) Strength

Allows you to configure the strength of the texture. The larger the value, the stronger will be the effect of the texture.





When [Image material] layer is stacked above ([Material] palette -> [Monochrome pattern] -> [Texture] -> [Rough] used)



When [Texture combine] is ON (Strength: 30)

Reference: When [Texture combine] is ON (Strength: 80)

J. Tool navigation

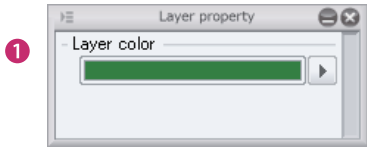
[Tool navigation] displays tools and sub tools that can be used for editing the selected layer.

Placing the mouse cursor over a tool icon on the [Tool navigation] displays the tool name. Clicking the tool icon switches the tool/sub tool.

The [Tool navigation] does not display when a layer including a raster layer and a vector layer is selected.

When a Selection Layer, Quick mask or Paper Layer Is Selected

This section describes the functions of the [Layer property] palette when a [Selection] layer, [Quick mask] or [Paper] layer is selected.

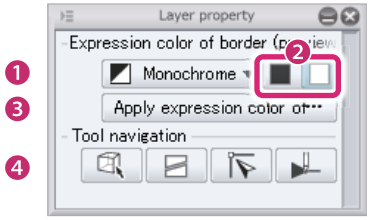


(1) Layer color

Allows you to specify an alternative color for the layer color. Clicking the color indicator configures the selected drawing color. Clicking the [▼] icon displays the dialog box for selecting a color. Configuring a color changes the display color of the layer to the configured color.

When Frame Border Folder Is Selected

This section describes the functions of the [Layer property] palette when a [Frame border folder] is selected.



(1) Expression color of border

Changes the expression color of the border. Select from [Color], [Gray] and [Monochrome].

When reducing colors degrades the border image quality, the view changes to [Expression color of border (preview)], where the image is displayed in reduced colors but in the original expression color.

Memo **[Expression color of border] reflects only in border lines. It does not reflect in layers inside the [Frame border-folder].**

(2) Drawing color

Configures the [Drawing color] applicable when [Gray] or [Monochrome] is selected for [Expression color of border]. Configure the color with the [Black] and [White] buttons.

Memo **[Drawing color] displays when [Expression color of border] is [Gray] or [Monochrome].**

Gray

The drawing color is configured as follows with the [Black] and [White] buttons.

Only black button ON	The drawing color is configured as a 256-step gradation from black to transparent.
Only white button ON	The drawing color is configured as a 256-step gradation from white to transparent.
Both black and white buttons ON	The drawing color is configured as a 256-step gradation from black to white.

Monochrome

The drawing color is configured as follows with the [Black] and [White] buttons.

Only black button ON	The drawing color is configured as black or transparent.
Only white button ON	The drawing color is configured as white or transparent.
Both black and white buttons ON	The drawing color is configured as black, white or transparent.

(3) Apply expression color of preview

Clicking the button converts the [Expression color] of the [Frame border folder] into the [Expression color of border] and [Drawing color] configured on the [Layer property] palette. The expression color prior to changing with that on the [Layer property] palette is discarded.

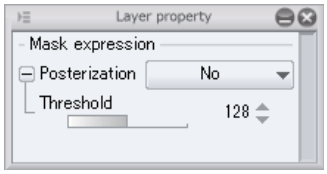
(4) Tool navigation

[Tool navigation] displays tools and sub tools that can be used for editing the selected layer.

Placing the mouse cursor over a tool icon on the [Tool navigation] displays the tool name. Clicking the tool icon switches the tool/sub tool.

When Correction Layer Is Selected

This section describes the functions of the [Layer property] palette when the [Correction] layer is selected.



(1) Posterization

Select posterization for the mask from [Yes] and [No]. Selecting [Yes] keeps the existing gradation. Selecting [No] binarizes the mask gradation.

[Gradation]: Yes

[Gradation]: No

(2) Threshold

This item displays when [No] is configured for [Gradation]. The color threshold configured with the slider becomes the border to divide the layer mask colors into [Black] and [Transparent].

Layer property Palette Menu

The following describes the functions included in the menu that displays when you click [Palette menu] on the upper left corner of the [Layer property] palette.

Hide layer property palette

Hides the [Layer property] palette.

Memo

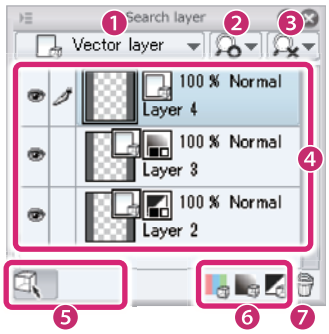
To display the [Layer property] palette again, select [Window] menu → [Layer property].

Search layer Palette

The [Search layer] palette is a palette that displays layers that match a specified condition, such as type.
The palette also allows you to select tools/sub tools that can be used in the displayed layer, as well as perform simple layer management operations such as create/delete a layer.
The [Search layer] palette displays when [Window] menu → [Search layer] is selected.

Functions of Search layer Palette

This section describes the functions of the [Search layer] palette.



(1) Target layer to show

Clicking displays a list of layer types. Turning on a check box displays the specified type of layer on the [Layer list].

(2) Refiner

Allows you to narrow down the layers displayed on the [Layer list] by specifying conditions. Conditions you can specify are: [View], [Lock], [Transparent pixel lock] and [Reference layer].

(3) Exclusion

Allows you to exclude the layers displayed on the [Layer list] by specifying conditions. Conditions you can specify are: [View], [Lock], [Transparent pixel lock], [Reference] layer and [Draft] layer.

(4) Layer list

Displays a list of layers according to conditions configured in [Target layer to show], [Refiner] and [Exclusion].

- The order in which layers are displayed on the [Layer list] cannot be changed.
- [Select layer], [Show/hide layer] and the like work in the same way as in the [Layer] palette. For details on the operating procedure, see "Layer Palette" → "Functions of Layer Palette" .

(5) Tool navigation

[Tool navigation] displays tools and sub tools that can be used to edit the selected layer.

For example, when [Text/Balloon] is specified, the [Object], [Text] and [Balloon] tools and sub tools are displayed as possible tools/sub tools.

Memo

- **Possible tools and sub tools may not display depending on the type of layer.**
- **[Tool navigation] does not display when multiple types of layers are specified in [Target layer to show].**

(6) Create new layer

Creates a new layer above the layer selected on the [Layer] palette.

Memo

- **Depending on the type of layer specified in [Refiner], the type of layer you may create varies.**
- **[Create new layer] may not display depending on the type of layer.**

(7) Delete layer

Deletes the layer selected on the [Search layer] palette.

Search layer Palette Menu

This section describes the functions included in the menu that displays when you click [Palette menu] on the upper left corner of the [Search layer] palette.

Memo **Some menu items can be run from the context menu that displays when you right click the mouse.**

New raster layer

Creates a new raster layer (layer for drawing) above the selected layer.

For details, see "Menu" → "Layer Menu" → "New raster layer" .

New layer

Creates a new layer above the selected layer.

For details, see "Menu" → "Layer Menu" → "New layer" .

New correction layer

Creates a correction layer above the selected layer. This layer allows you to adjust the brightness, hue, saturation, luminosity, gradation and the like of the layers below.

For details, see "Menu" → "Layer Menu" → "New correction layer" .

New layer folder

Creates a new layer folder.

For details, see "Menu" → "Layer Menu" → "New layer folder" .

Duplicate layer

Makes a copy of the selected layer or layer folder.

For details, see "Menu" → "Layer Menu" → "Duplicate layer" .

Delete layer

Deletes the selected layer or layer folder.

Important **When a layer folder is selected, also the layers stored in the folder are deleted.**

Layer mask

Creates a mask for the layer or layer folder selected on the [Search layer] palette. Masks can be deleted as well as configured.

Mask outside selection	Masks the area outside of the selected area. For details, see "Menu" → "Layer Menu" → "Layer Mask" → "Mask outside selection" .
Mask selection area	Masks the selected area. For details, see "Menu" → "Layer Menu" → "Layer Mask" → "Mask selection" .
Delete mask	Deletes the layer mask of a selected layer.
Apply mask to layer	Applies the layer mask. Applying the mask converts the layer into a [Raster] layer.
Enable mask	Turning on this item by selecting the menu enables the layer mask. For details, see "Menu" → "Layer Menu" → "Layer Mask" → "Enable mask" .
Show mask area	Turning on this item by selecting the menu displays the masked area in violet.
Link mask to layer	Turning on this item by selecting the menu links the layer and mask. When linked, the mask drawing moves along with the layer when this is moved using the [Move layer] tool. For details, see "Menu" → "Layer Menu" → "Layer Mask" → "Link mask to layer" .

Ruler - Frame

Allows you to delete and display rulers, create perspective rulers, and so on. It also allows you to configure whether to move the ruler along with the drawing area of the layer being edited, or separately. For details, see "Menu" → "Layer Menu" → "Ruler - Frame" .

Layer settings

Allows you to configure settings related to layers such as reference layer, clipping, layer lock, transparent pixel lock, and so on.

Set as reference layer	Configures a layer as [Reference] layer. With certain tools, you will be able to select and draw on the currently edited layer by referring only to this layer. For details, see "Menu" → "Layer Menu" → "Layer settings" → "Set as reference layer" .
Set as draft layer	Configures the layer being edited as [Draft] layer. For [Draft layers], the following settings are available when configuring as reference, or exporting files. ● Whether or not to include the [Draft] layer when exporting files with [File] menu → [Export (Single Layer)]. ● Whether or not to include the [Draft] layer when configuring print settings with [File] menu → [Print settings]. ● Whether or not to include the [Draft] layer in the layers to refer to when creating a selection, or performing a fill.
Clip at layer below	Limits the area of the selected layer to display by referring to the layer immediately below. For details, see "Menu" → "Layer Menu" → "Layer settings" → "Clip at layer below" .
Lock layer	Locks a layer to make layer settings unchangeable. Clicking toggles the lock on and off.
Lock transparent pixel	Locks drawing to transparent areas of a layer. Allows you to draw on already drawn areas without running over to transparent areas. Clicking toggles the lock on and off.
Show layer	Clicking this item toggles the selected layer between display and hide.
Advanced settings	Opens the dialog box for correction if the correction layer is selected. For details on the dialog box, see "New correction layer" . Moreover, for [Fill in monochrome] layer, opens the dialog box for selecting a color.

Selection from layer

Allows you to create a selection area from a drawing on the currently edited layer. You can also add or delete a selection to/from an already selected area. Furthermore, you can create a selection from the area overlapping an already selected area.

For details, see "Menu" → "Layer Menu" → "Selection from layer" .

Create selection	Creates a selection area from a drawing on the currently edited layer.
Add selection	Creates a selection area from a drawing on the currently edited layer and adds it to an already selected area.
Delete selection	Creates a selection area from a drawing on the currently edited layer and removes that portion from an already selected area.
Select overlapping area	Creates a selection area from a drawing on the currently edited layer and creates another selection area only from the area overlapping with an already selected area.

Rasterize

Converts the content of a layer other than [Raster] layer into [Raster] layer.

Memo

For frame border layers, rasterization is performed by keeping the original frame folder. After rasterization, frames within the original frame border layer become hidden.

Convert layer

Converts the type of the layer selected on the [Layer] palette. You can change the type and expression color of a layer, as well as convert a drawing inside a selected area into an image material layer.

For details, see "Menu" → "Layer Menu" → "Convert layer" .

LT conversion of layer [EX] *

Allows you to separate a selected layer into outlines (line drawings) and tones and convert each of them into different layers.

For details, see "Menu" → "Layer Menu" → "LT conversion of layer [EX] *" .

Transfer to lower layer

Transfers the image on the layer selected on the [Layer] palette to the layer immediately below.

For details, see "Menu" → "Layer Menu" → "Transfer to Lower Layer" .

Combine to layer below

Combines the layer selected on the [Layer] palette with that immediately below to make one.

For details, see "Menu" → "Layer Menu" → "Combine to Layer below" .

Combine selected layer

Combines the layers selected on the [Search layer] palette to make one. This is used to join images drawn separately, for example.

For details, see "Menu" → "Layer Menu" → "Combine Selected Layer" .

Combine showing layer

Combines only layers displayed on the [Search layer] palette. Hidden layers are not combined and are left as they are.

For details, see "Menu" → "Layer Menu" → "Combine Showing Layer" .

Combine copies of displayed layer *

Combines the copies of visible layers. The original layers are kept as they are.

For details, see "Menu" → "Layer Menu" → "Combine copies of displayed layer *" .

Merge layers

Combines all layers into one.

For details, see "Menu" → "Layer Menu" → "Merge Layers" .

Thumbnail size

Allows you to select the size of the thumbnails to be displayed on the [Search layer] palette from [None], [Smallest], [Small], [Medium] and [Large].

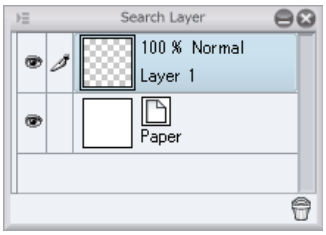
Thumbnail showing area

Allows you to select the area to be displayed in the thumbnail on the [Search layer] palette.

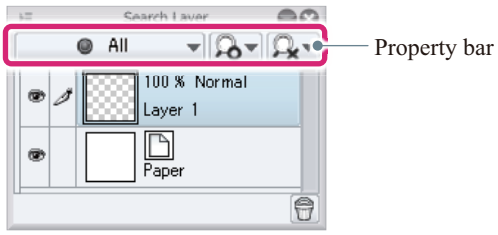
Show whole canvas	Display the entire canvas in the thumbnail.
Show only layer area	Display only the drawn area of the layer in the thumbnail.

Show property bar

When turned on, displays the property bar of the [Search layer] palette.



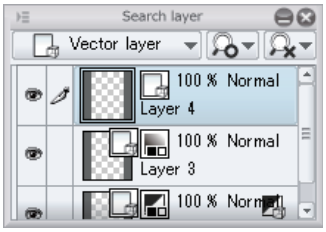
Show property bar: OFF



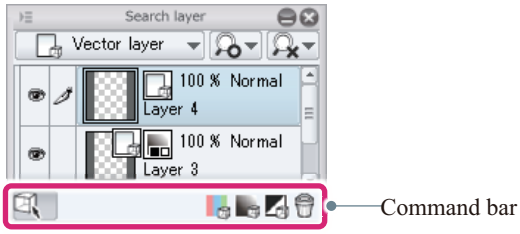
Show property bar: ON

Show command bar

When turned on, displays the command bar of the [Search layer] palette.



Show command bar: OFF



Show command bar: ON

Place command bar below list

When turned on, displays the command bar of the [Search layer] palette below the [Layer list].

When turned off, displays the command bar of the [Search layer] palette above the [Layer list].

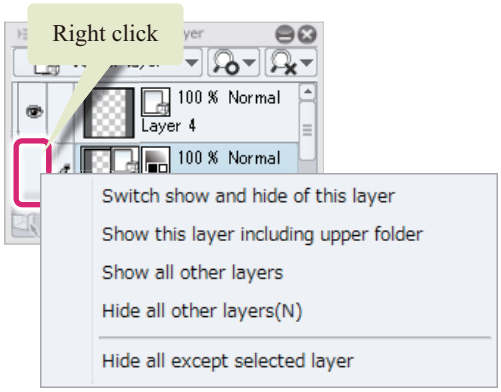
Hide search layer palette

Hides the [Search layer] palette.

Memo **To display the [Search layer] palette again, select [Window] menu → [Search layer].**

Show/hide layer Toggle Menu

Right clicking [Show/hide layer] on the [Search layer] palette displays a menu that toggles the layer visibility.


Right click
100 % Normal
Layer 4
100 % Normal
Switch show and hide of this layer
Show this layer including upper folder
Show all other layers
Hide all other layers(N)
Hide all except selected layer

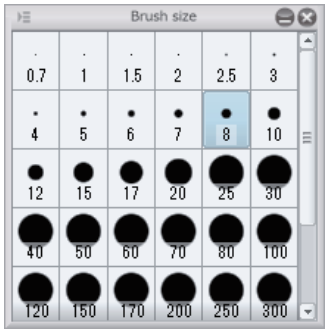
The menu works in the same way as in the [Layer] palette. For details, see "Layer Palette" → "Functions of Layer Palette" → "Layer Palette Menu" → "Show/hide layer Toggle Menu" .

Brush size Palette

The [Brush size] palette displays when [Window] menu → [Brush size] is selected.
It allows you to select a tool size from preconfigured values. Furthermore, it also allows you to register the size of the tool you are using in the palette.

Functions of Brush size Palette

The [Brush size] palette allows you to select a tool size from preconfigured values. Furthermore, it also allows you to register the size of the tool you are using in the palette.



Brush size Palette Menu

The following describes the functions included in the menu that displays when you click [Palette menu] on the upper left corner of the [Brush size] palette.

Memo **Some menu items can be run from the context menu that displays when you right click the mouse.**

Show slider

When turned on, displays a slider for the tool size, which allows you to change the size of pens and brushes by moving it or by inputting a value.

Add current size to preset

Registers the current tool size in the [Brush size] palette.

Delete preset of current size

Unregisters the current tool size from the [Brush size] palette.

Hide brush size palette

Hides the [Brush size] palette.

Memo **To display the [Brush size] palette again, select [Window] menu → [Brush size].**

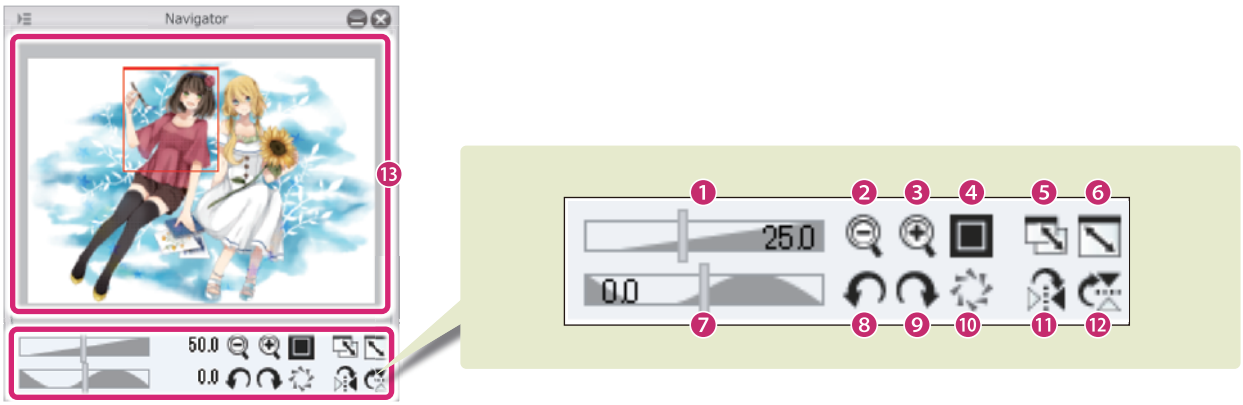
Navigator Palette

The chapter describes the functions of the [Navigator] palette.

Functions of Navigator Palette

The [Navigator] palette allows you to manage the view of the image displayed on the canvas window. It allows you to adjust the display position, scale and angle.

Memo **You can also adjust the scale and angle of the image with the sliders and icons at the lower left of the canvas window.**



(1) Scale up/down slider

Drag the slider to adjust the scale to display the image on the canvas window. Dragging to the right zooms in the image while dragging to the left zooms out the image.

(2) Zoom out

When clicked, zooms out the image displayed on the canvas window.

Memo **The step by which the view will zoom out is configured by [Scale] on the [Preferences] dialog box → [Canvas]. For details, see "File Menu" → "Preferences [Windows]" → "Canvas" .**

(3) Zoom in

When clicked, zooms in the image displayed on the canvas window.

Memo **The step by which the view will zoom in is configured by [Scale] on the [Preferences] dialog box → [Canvas]. For details, see "File Menu" → "Preferences [Windows]" → "Canvas" .**

(4) Pixel size

When clicked, displays the image on the canvas window in actual pixels (100%).

(5) Fit to Navigator

When clicked, displays the image on the canvas in such size as to fit it completely in the window. The size of the image changes in conjunction with that of the window.

(6) Fit to Screen

When clicked, displays the image on the canvas in such size as to fit it completely in the current window. The size of the image does not change in conjunction with that of the window.

(7) Rotation slider

Drag the slider to adjust the display angle of the image displayed on the canvas window. Dragging to the right rotates the image to the right (clockwise) while dragging to the left rotates the image to the left (counterclockwise).

(8) Rotate left

When clicked, rotates the image displayed on the canvas window to the left by a specified angle.

Memo

The step by which the view will rotate by [Rotate left] is configured by [Angle] on the [Preferences] dialog box → [Canvas]. For details, see "File Menu" → "Preferences [Windows]" → "Canvas" .

(9) Rotate right

When clicked, rotates the image displayed on the canvas window to the right by a specified angle.

Memo

The step by which the view will rotate by [Rotate right] is configured by [Angle] on the [Preferences] dialog box → [Canvas]. For details, see "File Menu" → "Preferences [Windows]" → "Canvas" .

(10) Reset rotation

When clicked, resets the display angle of the image displayed on the canvas window to the original angle (0 degrees).

(11) Flip horizontal

When turned on, reverses horizontally the image displayed on the canvas window.

(12) Flip vertical

When turned on, reverses vertically the image displayed on the canvas window.

(13) Image preview

Displays completely the image currently displayed on the canvas window.

The area displayed on the canvas window is displayed framed in red. Dragging on the [Navigator] palette moves the red frame, changing the display position of the image displayed on the canvas window.

Navigator Palette Menu

This section describes the functions included in the menu that displays when you click [Palette menu] on the upper left corner of the [Navigator] palette.

Rotate/Invert

Allows you to rotate and reverse the view.

Reset rotate	Resets the display angle of the image displayed on the canvas window to the original angle (0 degrees).
Rotate 90	Rotates the view by 90 degrees.
Rotate 180	Rotates the view by 180 degrees.
Rotate 270	Rotates the view by 270 degrees.
Flip horizontal	Reverses the view horizontally.
Flip vertical	Reverses the view vertically.
Rotate left	Rotates the view to the left by a certain angle.
Rotate right	Rotates the view to the right by a certain angle.

Memo

The step by which the view will rotate by [Rotate left] or [Rotate right] is configured by [Angle] on the [Preferences] dialog box → [Canvas]. For details, see "File Menu" → "Preferences [Windows]" → "Canvas" .

Zoom in

When clicked, zooms in the image displayed on the canvas window.

Memo

The step by which the view will zoom in is configured by [Scale] on the [Preferences] dialog box → [Canvas]. For details, see "File Menu" → "Preferences [Windows]" → "Canvas" .

Zoom out

When clicked, zooms out the image displayed on the canvas window.

Memo

The step by which the view will zoom out is configured by [Scale] on the [Preferences] dialog box → [Canvas]. For details, see "File Menu" → "Preferences [Windows]" → "Canvas" .

Pixel size

When clicked, displays the image on the canvas window in actual pixels (100%).

Fit to Screen

When clicked, displays the image on the canvas in such size as to fit it completely in the current window. The size of the image does not change in conjunction with that of the window.

Reset display

Resets the position, angle, reversed state of the view, and displays the entire view.

Fit to Navigator

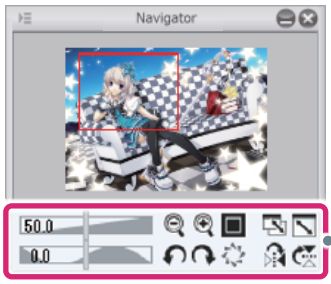
When clicked, displays the image on the canvas in such size as to fit it completely in the window. The size of the image changes in conjunction with that of the window.

For details, see "Menu" → "View Menu" → "Fit to Navigator" .

Show command bar

When turned on, displays the command bar of the [Navigator] palette.

Show command bar: OFF



Show command bar: ON

Hide navigator palette

Hides the [Navigator] palette.

Memo **To display the [Navigator] palette again, select [Window] menu → [Navigator].**

Sub view Palette

Allows you to acquire a color from an image displayed as color reference.
The [Sub tool] palette displays when [Window] menu → [Sub tool] is selected.

Acquiring Colors from a Reference Image

This section describes the procedure to acquire colors from a reference image imported to the [Sub view] palette.

1 Import the image to refer to

Click [Import] on the [Sub view] palette. From the [Open file] dialog box, import the image whose colors you want to use as reference.

2 Select the color

Select the color from the image imported to the [Sub view] palette.

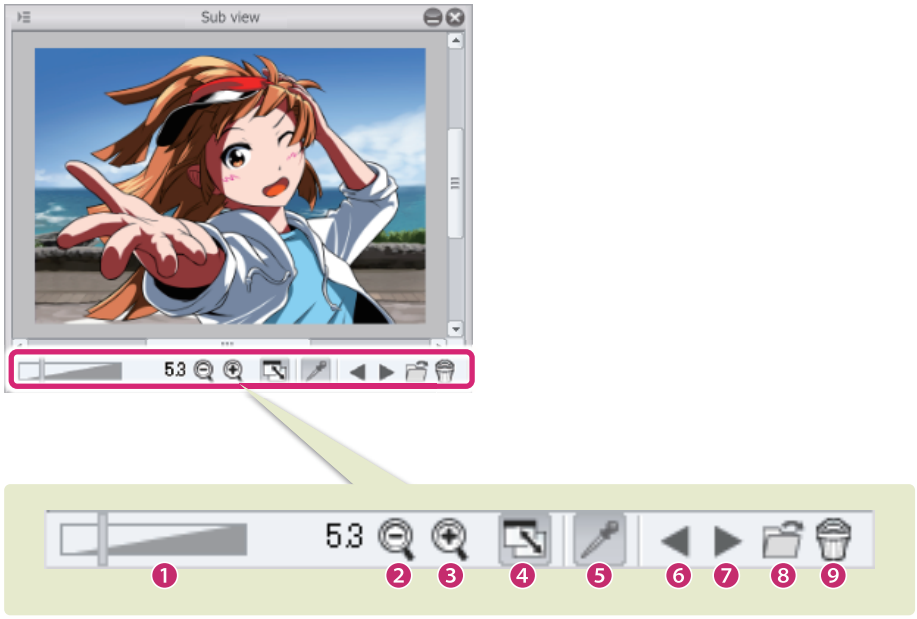
(1) Check that [Switch to eye dropper automatically] is turned on.

(2) Click the area in the color to acquire.

(3) The color of the clicked area displays as drawing color in the [Color] palette.

Functions of Sub view Palette

This section describes the functions of the [Sub view] palette.



(1) Scale up/down slider

Drag the slider to adjust the display scale for the image on the [Sub view] palette. Dragging to the right scales up the image while dragging to the left scales down the image. Clicking the value displayed on the right side allows you to input the scale numerically.

(2) Zoom out

When clicked, zooms out the image displayed on the [Sub view] palette.

(3) Zoom in

When clicked, zooms in the image displayed on the [Sub view] palette.

(4) Fit to Navigator

When turned on, displays the image on the [Sub view] palette in such size as to fit it completely in the palette. The size of the image changes in conjunction with the palette size when the latter is changed.

(5) Switch to eye dropper automatically

When turned on, the mouse cursor becomes an [Eye dropper] tool when placed on the [Sub view] palette, which will allow you to acquire a color.

When turned off, the mouse cursor becomes a [Hand] tool when placed on the [Sub view] palette, which will allow you to move the image view.

(6) To previous image

When multiple images are imported, displays the image prior to the currently displayed one.

(7) To next image

When multiple images are imported, displays the image next to the currently displayed one.

(8) Import

When clicked, displays the dialog box for selecting a file. Selecting a reference image imports the image to the [Sub view] palette.

Memo

- **You can import multiple images to the [Sub view] palette. Switch each of the imported images for use.**
- **You can also import an image file to the [Sub view] palette by drag and drop.**

(9) Clear

Clicking clears the image displayed on the [Sub view] palette.

Sub view Palette Menu

This section describes the functions included in the menu that displays when you click [Palette menu] on the upper left corner of the [Sub view] palette.

Zoom in

When clicked, zooms in the image displayed on the [Sub view] palette.

Zoom out

When clicked, zooms out the image displayed on the [Sub view] palette.

Fit to Navigator

When turned on, displays the image on the [Sub view] palette in such size as to fit it completely in the palette. The size of the image changes in conjunction with the palette size when the latter is changed.

Switch to eye dropper automatically

When turned on, the mouse cursor becomes an [Eye dropper] tool when placed on the [Sub view] palette, which will allow you to acquire a color.

When turned off, the mouse cursor becomes a [Hand] tool when placed on the [Sub view] palette, which will allow you to move the image view.

Import

When clicked, displays the dialog box for selecting a file. Selecting a reference image imports the image to the [Sub view] palette.

Memo

- **You can import multiple images to the [Sub view] palette. Switch each of the imported images for use.**
- **You can also import an image file to the [Sub view] palette by drag and drop.**

Clear

When clicked, clears the image displayed on the [Sub view] palette.

To previous image

When multiple images are imported, displays the image prior to the currently displayed one.

To next image

When multiple images are imported, displays the image next to the currently displayed one.

Show command bar

When turned on, displays the command bar of the [Sub view] palette.

Show command bar: OFF

Show command bar: ON

Hide sub view palette

Hides the [Sub view] palette.

Memo

To display the [Sub view] palette again, select [Window] menu → [Sub view].

Material Palettes

These palettes manage a variety of materials used for drawing illustrations and manga. The materials can be dragged and dropped to the canvas for use.
The Material palettes are displayed from [Window] menu → [Material].

Characteristics and Types of Materials

This section describes the characteristics and types of materials included in Manga Studio 5.0.

Characteristics of Materials

Materials included in the [Material] palette have the following characteristics:

- Some materials are 3D data. The orientation and size of 3D materials can be changed after being imported to the canvas.
- Materials can be used directly by dragging and dropping to the canvas.
- Importing a material to the canvas creates a layer. Each material has its layer stacking order configured. For example, importing a background material creates a layer at the bottom of the layers or layer folder.
- Some materials come with preconfigured size and tiling layout. When imported, their size are automatically adjusted to fit the canvas or frame border.

Types of Materials

Manga Studio 5.0 comes with the following [Material] palettes by default.

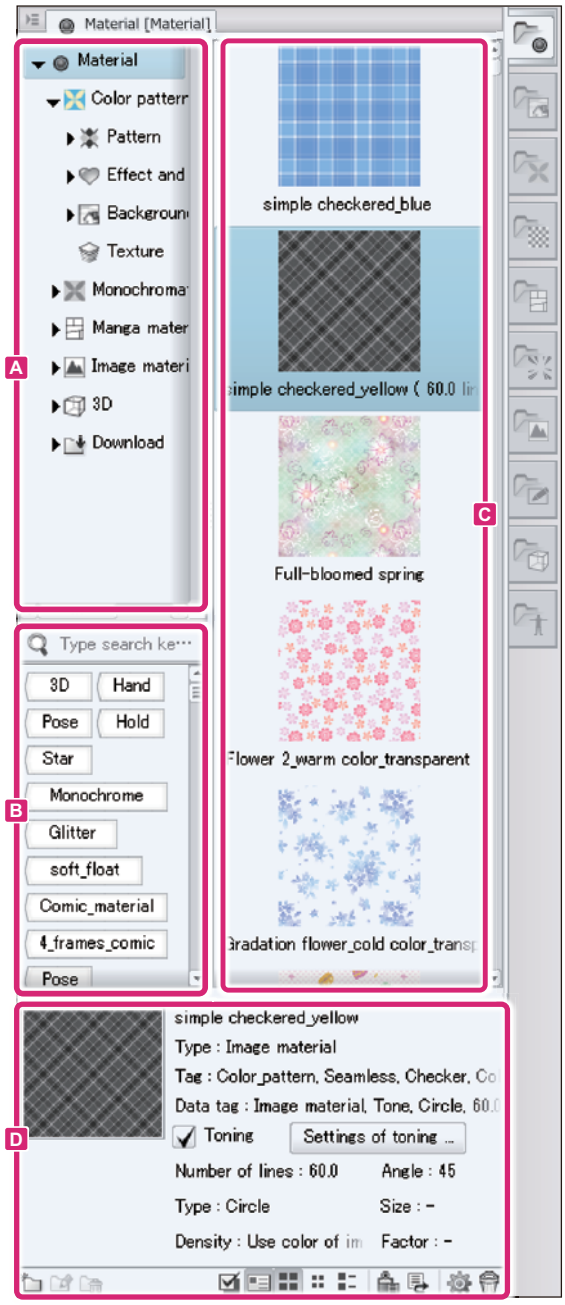
Important **Users of the download version and value version can download additional materials to install from Manga Studio 5.0 download page.**

Tree view folder		Layer type	Contents
Color pattern		Image material layer	Includes color patterns, background images, texture images and the like.
Monochrome pattern		Image material layer	Includes monochrome patterns, background images, texture images and the like.
Manga material	Framing template	Frame folder	Includes templates composed of multiple frame border folders.
	Balloon	Text/Balloon layer	Includes materials for balloons.
	Effect line	Image material layer	Includes image materials for effect lines.
	Sound Effect	Image material layer	Includes image materials for sound effects.
	Signs	Image material layer	Includes image materials for signs.
Image material		Image material layer	Includes illustration materials such as buildings, flowers and decoration. Also includes image materials for brush tips.

Tree view folder		Layer type	Contents
3D	Body shape	3D layer	Includes body shape data for 3D drawing doll material.
	Pose	3D layer	Includes pose data for 3D character material, pose model material and 3D drawing doll material.
	Character	3D layer	Includes 3D character materials. Orientation, facial expression and the like can be adjusted with the [Tool property] palette.
	Small object	3D layer	Includes small 3D object materials. Orientation, size and the like can be adjusted with the [Object launcher].
	Background	3D layer	Includes 3D background materials. Orientation, size, layout, color (texture) and the like can be adjusted with the [Tool property] palette.
Material		-	Displays all materials included.

Functions of Material Palettes

This section describes the functions of the [Material] palettes.



A. Tree View

Displays the [Material] palettes hierarchically. Double clicking the folder or folder name part expands the sub-folders.

B. Tag List

Displays tags assigned to materials as a list of buttons. It also allows for keyword input to search for a material.

(1) Search box

Input a keyword to search for a material registered in the currently open [Material] palette.

(2) Tag list

A list of tags assigned to materials displayed as buttons. Clicking a button displays the included materials in [Material list].

C. Material List

Displays the list of materials registered in the currently open [Material] palette. A listed material can be selected from the list and pasted to the canvas by either of the methods below.

- Drag and drop the thumbnail to the canvas
- Drag and drop the thumbnail to the [Layer] palette
- Select the thumbnail and click [Paste material] of [Command bar]

Memo

- **When the selected material is a sub tool, you can import the sub tool by dragging and dropping to the [Sub tool] palette.**
- **When the selected material is a color set, you can import the color set by dragging and dropping to the [Color set] palette.**

D. Detailed information of material

Displays information on the material selected on the [Material list]. It also allows for configuring toning settings for the selected material.

(1) Material info. view

Displays information on the material selected on the [Material list].

(2) Toning

When turned on, pasting the material selected on the [Material list] to the canvas displays the material in black and white halftone dots (toned).

Clicking [Tonization settings...] opens the [Simple tone settings] dialog box. On the dialog box, you can configure settings related to toning in detail. The configured settings are previewed in the lower part of the palette.

Memo

- **For details on the [Simple tone settings] dialog box, see "[Simple tone settings] Dialog Box" .**
- **With the [Layer property] palette, tone settings can be changed even after the material is pasted to the canvas. For details, see "Layer property palette" .**

E. Command bar

Configures the display method of each item on the [Material] palette. Allows you to manage materials such as creating material folders and deleting materials.

(1) Create folder tag

Create a new folder in [Tree view].

(2) Rename folder tag

Renames the selected folder in [Tree view].

Important

Default folders cannot be renamed.

(3) Delete a folder tag

Renames the selected folder in [Tree view].

Important

- **Default folders cannot be deleted.**
- **Deleting a folder deletes the materials inside.**

(4) Show item checkbox

Shows a checkbox for each thumbnail of the materials shown in [Material list]. You can select a material by turning on the checkbox.

(5) View detail information of material

Displays/hides the [Detailed information of material].

(6) Thumbnail [Large]

Shows the large thumbnails of the materials shown in [Material list].

(7) Thumbnail [Small]

Shows the small thumbnails of the materials shown in [Material list].

(8) Thumbnail [Detail]

Shows the thumbnails as well as informationof the materials shown in [Material list].

(9) Paste material

Pastes the material selected on the [Material list] to the canvas.

Memo

- **When the selected material is a sub tool, the import destination is the [Sub tool] palette.**
- **When the selected material is a color set, the import destination is the [Color set] palette.**

(10) Swap material

Replaces the material pasted on the canvas with that selected in the [Material list].

Memo

For details on how to swap materials, see "Swapping a Pasted Material" .

(11) Material property

Selecting and clicking a material on the [Material list] opens the [Material property] dialog box.

On the dialog box, you can configure settings such as name, content, paste operation, save destination, tag for search and the like for the material.

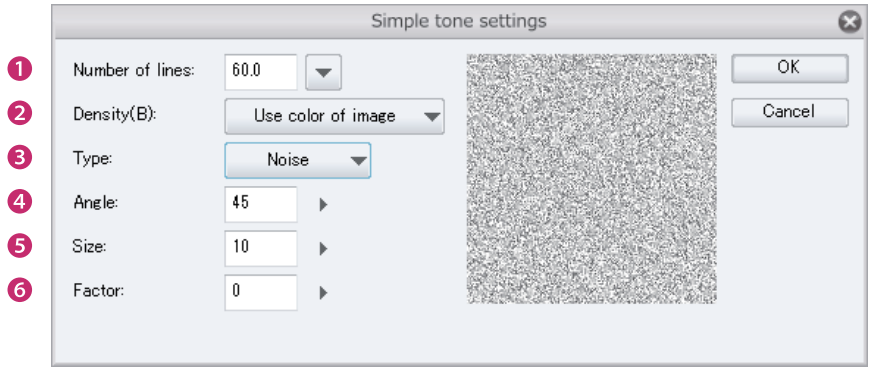
Memo

- **The [Material property] dialog box also opens when the thumbnail of the material on the [Material list] is double clicked.**
- **For details on the [Material property] dialog box, see "[Material property] Dialog Box" .**

(12) Delete material

Deletes the material selected on the [Material list].

[Simple tone settings] Dialog Box



(1) Number of lines

Specify the number of tone (halftone dot) lines. The larger the value, the smaller will be the halftone dot.

(2) Density

Configure the method for specifying the tone density.

Use color of image	Configures the tone density based on the image color.
Use brightness of image	Configures the tone density based on the image brightness.

Memo **When the material is a [Fill in monochrome] layer, [Density] must be specified numerically.**

(3) Type

Select the shape of the tone.

(4) Angle

Configure the angle of the tone (halftone dot).

(5) Size

Configure the noise size. You can configure this item when noise is selected for [Type].

(6) Factor

Configure the noise factor. You can configure this item when noise is selected for [Type].

[Material property] Dialog Box

The following describes the [Material property] dialog box.

(1) Material name

Input a name for the material.

Important **[Material details] and [Scale up/down] can be configured only when registering only one [Raster] layer or [Image material] layer without layer mask and without rulers.**

(2) Material settings for brush

Turn on this item when using the material as material for brush.

You can configure [Use for brush tip shape] and [Use for paper texture].

Memo

- **For [Brush tip shape], see "Manga Studio 5.0 Tool Setting Guide" → "Brush shape".**
- **For [Paper texture], see "Manga Studio 5.0 Tool Setting Guide" → "Brush shape → Texture".**

(3) Scale up/down

Configure the size when the material is pasted.

Adjust after pasting	Displays handles to adjust the size when the material is pasted.
Expand in full	The material is pasted in such a size as to completely cover the destination. This setting is suitable for backgrounds.
Fit to scale	The material is pasted in such a size as to fit completely into the destination. This setting is suitable for sound effects and the like which must fit completely.
Adjust according to destination	The material is enlarged or reduced in accordance with the size of the destination. This setting is suitable for materials such as illustrations, where only a portion of the material is arranged.
Fit to text	It allows for materials to be enlarged or reduced in accordance with the size of a text present at the position where the material will be pasted.

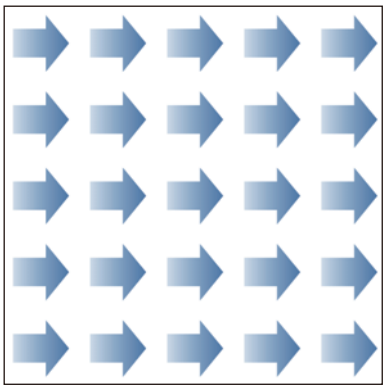
Memo **If the destination is a frame folder, the image is resized in accordance with the size of the frame border for pasting.**

(4) Tiling

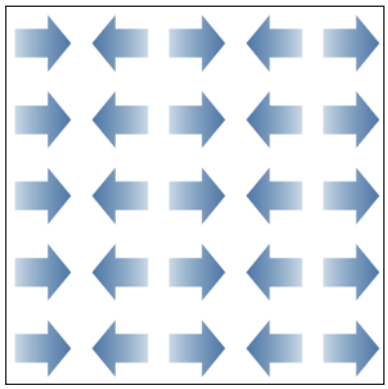
When turned on, the material is arranged as a tile when pasted. Specify the repeat type and direction of tiling with the pull down menu.

Tiling

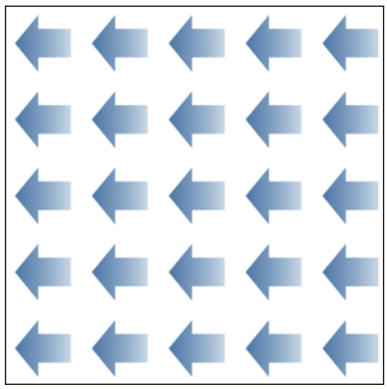
From the pull down menu, specify the repeat type when tiling images.



Repeat



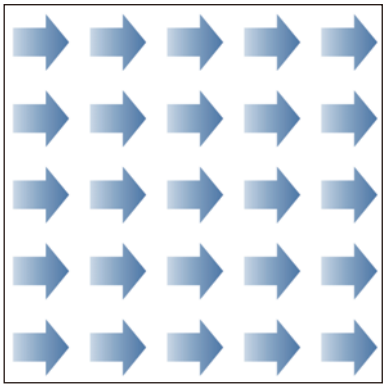
Reverse



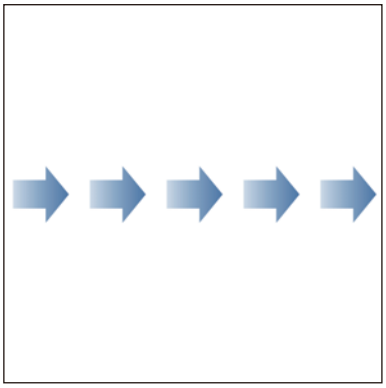
Flip

Tiling direction

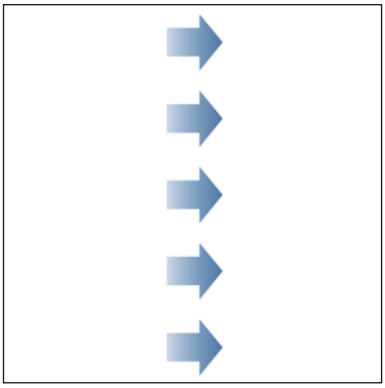
From the pull down menu, specify the direction when tiling images.



Verttical and horizontal



Only horizontal



Only vertical

Verttical and horizontal	The image is arranged vertically and horizontally.
Only horizontal	The image is arranged only in the horizontal direction.
Only vertical	The image is arranged only in the vertical direction.

(5) Specify overlay

Specifies the position of the [Layer] palette where the pasted material will be inserted.

When turned off, a new layer is created above the currently edited layer, and the material pasted to the new layer.

When turned on, you can specify with a slider the position where to insert the layer with the material.

(6) Location to save material

Click a folder to specify the location to save the material. The specified location is reflected in the [Tree view] of the [Material] palette.

(7) Search tag

Click the tag list to specify the search tag to be displayed on the [Tag list].

Clicking the tag with a + sign in the lower right will allow you to create a new tag.

Material Palette Menu

This section describes the functions included in the menu that displays when you click [Palette menu] on the upper left corner of the [Material] palette.

Register Image as Material

Converts into material an image within a selected area, or a layer selected on the [Layer] palette or [Search layer] palette. Converted materials are registered in a [Material] palette.

Folder tag → Create new

Creates a new folder in [Tree view].

Folder tag → Delete

Renames the selected folder in [Tree view].

Important

- **Default folders cannot be deleted.**
- **Deleting a folder deletes the materials inside.**

Folder tag → Change name

Renames the selected folder in [Tree view].

Important

Default folders cannot be renamed.

Select with Check Box

Shows a checkbox for each thumbnail of the materials shown in [Material list]. You can select a material by turning on the checkbox.

Paste Material to Canvas

Pastes the material selected on the [Material list] to the canvas.

Swap material

Replaces the material pasted on the canvas with that selected in the [Material list].

Memo

For details on how to swap materials, see "Swapping a Pasted Material" .

Material property

Shows the [Material property] dialog box of the selected material in [Material list].

On the dialog box, you can configure settings such as name, content, paste operation, save destination, tag for search and the like for the material.

Delete material

Deletes the material selected on the [Material list].

How to show

Selects the thumbnails shown in [Material list] from [Detail], [Large thumbnail], and [Small thumbnail].

View Detail Information of Material

Displays/hides the [Detailed Information of Material].

Show command bar

Displays/hides the [Command bar].

Hide material [...] palette

Hides the currently open [Material] palette.

Memo

To display again the [Material] palette you have hidden, select the palette to display from [Window] menu → [Material].

Operating the Tree View

To edit the [Tree view] folder, proceed as follows.

Adding a Folder to the Tree View

Select the folder and right click to display the menu. Selecting [New] from the menu creates a new folder in the selected folder.

Deleting a Folder from the Tree View

Select the folder and right click to display the menu. Select [Delete] from the menu. Clicking [Yes] on the dialog box confirming deletion deletes the selected folder.

Important

- **Default folders cannot be deleted.**
- **Deleting a folder deletes the materials inside.**

Renaming a Folder in the Tree View

Select the folder and right click to display the menu. Select [Rename] from the menu to change the name of the selected folder.

Important

Default folders cannot be renamed.

Moving a Folder in the Tree View

To move a folder, select the folder and drag and drop it to the desired position.

Important

Default folders cannot be moved.

Moving Materials of Another Folder

To move a material to another folder, select the material on the [Material list] and drag and drop it to the other folder on the [Tree view].

Using Materials

This section describes how to paste and edit materials.

Pasting Materials

The way to import a material varies depending on the selected material.

Image Materials

Image materials registered in the palette are pasted by dragging from the [Material] palette and dropping to the canvas.

Memo

- **Materials can also be pasted to the canvas by clicking [Paste material] on the [Material] palette.**
- **Dragging and dropping thumbnails on the [Layer] palette, allows you to paste materials on the canvas.**
- **Selecting multiple materials and dragging and dropping them to the canvas, allows you to paste them in one go.**

Sub Tools

Materials can be imported to the [Sub tool] palette by drag and drop.

Memo

- **Selecting multiple sub tool materials and dragging and dropping them on the palette allows you import them to the palette in one go.**
- **Some sub tools may not be imported in DEBUT depending on their content.**

Color Sets

Color sets can be imported to the [Color set] palette by drag and drop.

Memo

- **Selecting multiple color set materials and dragging and dropping them to the palette allows you import them to the palette in one go.**
- **Some color sets may not be imported in DEBUT depending on their content.**

Auto action Sets

To import an auto action set, drag and drop the material to the [Auto action] palette.

Memo

Selecting multiple auto action set materials and dragging and dropping them to the palette allows you import them to the palette in one go.

Swapping a Pasted Material

A material pasted on the canvas can be replaced with another material.

1 Select the layer

On the [Layer] palette, select the layer including the material to replace.

Important

The layer target of the replacement must meet all of the conditions below.

- **The layer target of the replacement is one.**
- **The selected layer is none of the following: [Correction] layer, [Paper] layer, [3D] layer, [Frame folder], [Layer folder].**
- **The layer is not locked. When the layer is inside a layer folder, the corresponding layer folder is not locked.**
- **The layer is visible. When the layer is inside a layer folder, the corresponding layer folder is visible.**

Memo

When [Quick mask] or [Selection stock] is selected, it is converted to [Layer mask] after the replacement.

2 Select the material to replace

On the [Material] palette, select the material.

Important

The material to replace must meet all of the conditions below.

- **It is an image material.**
- **The material consists of one layer.**
- **The material is not stored inside a layer folder.**
- **The material selected in the [Material] palette is one.**

3 Replace the material

Clicking [Swap material] on the [Material] palette replaces the pasted material.

Memo

You can also replace by dragging and dropping the selected material on the corresponding layer of the [Layer] palette.

Editing Materials

The way to edit imported materials varies depending on the layer type of the material.

Layer type	Editing method
Image material layer	See "Import" .
Frame border folder	See "Editing a Frame Border" .
Text layer	See "Explanation: Balloons and Text" .
3D layer	See "Explanation: 3D Materials" .

Memo

For details on the layer type of each [Material] palette, see "Types of Materials" .

Registering a Material

This section describes how to register a material in a [Material] palette.

Registering a Material from the Canvas

To register in a [Material] palette an image selected on the canvas, proceed as follows.

1 Select the image

With a Marquee tool, select the image to convert into material.

Memo **If a selection is not created, the drawing on the canvas will be registered in the [Material] palette.**

2 Select the command

Click [Palette menu] on the [Material] palette, and select [Register image as material].

Memo **You can also select the command from [Edit] menu → [Register image as material].**

3 Configure the material

The [Material property] dialog box displays. Configure the settings for the material on the dialog box.

Memo **For details on the [Material property] dialog box, see "[Material property] Dialog Box" .**

(1) You can configure settings such as name, content, paste operation, save destination, tag for search and the like for the material.

(2) Click [OK].

4 The conversion of image into material is complete

The dialog box closes and the material is registered in the [Material] palette as configured.

Registering a Layer as Material

To register in a [Material] palette a layer selected on the [Layer] palette or [Search layer] palette, proceed as follows.

Memo

When multiple layers are selected and registered, they are registered in the [Material] palette with the layer structure kept.

1 Select the layer

On the [Layer] palette or [Search layer] palette, select the layer to convert into material.

Memo

Creating a selection area registers in the [Material] palette the drawing in the selected area.
If a selection area is not created, the drawing on the canvas will be registered in the [Material] palette.

2 Select the command

Click [Palette menu] on the [Material] palette, and select [Register image as material].

Memo

- **You can also select the command from [Edit] menu → [Register image as material].**
- **An image can also be registered as material by dragging and dropping the selected layer to [Material list] on the [Material] palette. When registered in this way, the [Material property] dialog box does not display.**

3 Configure the material

The [Material property] dialog box displays. Configure the settings for the material on the dialog box.

Memo

For details on the [Material property] dialog box, see "[Material property] Dialog Box" .

(1) You can configure settings such as name, content, paste operation, save destination, tag for search and the like for the material.

(2) Click [OK].

4 The conversion of image into material is complete

The dialog box closes and the layer material is registered in the [Material] palette as configured.

Registering a Sub Tool

To register a sub tool, use [Register sub tool as material] on the [Sub tool] palette menu.

Memo

A sub tool can also be registered as material by dragging the sub tool selected on the [Sub tool] palette and dropping it to [Material list] of the [Material] palette. When registered in this way, the [Material property] dialog box does not display.

Registering a Color Set

To register a color set, use [Register color set as material] on the [Color set] palette menu.

Registering an Auto Action Set

To register an auto action set, use [Register set as material] on the [Auto action] palette menu.

Searching for a Material

Search for a material is possible from the [Search box] or the [Tag list].

Memo **The [Search box] and [Tag list] can be used combined for searching.**

Searching from the Search Box

Input a keyword to search for a material registered in the currently open [Material] palette.

Memo **To clear the search conditions, use [Show all materials in folder] inside the [Material list].**

Regarding the Keyword

- Input a material name or tag name for keyword
- Words matching partly to the keyword can also be searched
- Words including spaces can be searched by enclosing them between double quotation marks (")
- Search is not sensitive to hiragana and katakana

Specifying Multiple Keywords

Specifying multiple keywords using space as separator will allow you to narrow down the search results.

For example, assuming that there are two materials having "smile" in its name, and that

The [Tag] of one of them contains "male" and that of the other contains "female",

Inputting "smile" displays both materials in the results. Inputting "smile female" displays only the material with "smile" in its [Material name], and "female" in its [Tag] in the results.

Searching from the Tag List

Turning on a button on the [Tag list] displays materials with the same tag on the [Material list].

Memo **To clear the conditions for searching the tag list, proceed as follows:**

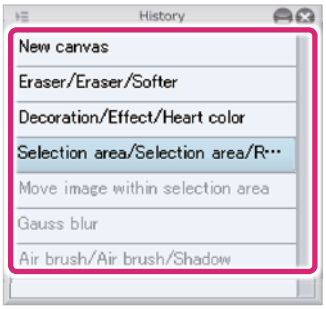
- **Click the button again.**
- **Click [Show all materials in folder] inside the [Material list].**

History palette

This chapter describes the functions of the [History] palette.

Functions of History Palette

The [History] palette records and manages operation history. Clicking an operation record on the palette allows you to reverse operations up that point.



Operation history

Displays the operation history chronologically from the oldest one. Clicking the record of the operation up to which to revert, restores the canvas to the state immediately after the execution of the clicked record.

Memo

- **The maximum number of operations that can be recorded in the [Operation history] is determined by the value configured in [File] menu → [Preferences] → [Performance] → [Undo count].**
- **To clear the [Operation history], select [Edit] menu → [Clear memory] → [History].**

History Palette Menu

This section describes the functions included in the menu that displays when you click [Palette menu] on the upper left corner of the [History] palette.

Hide history palette

Hides the [History] palette.

Memo

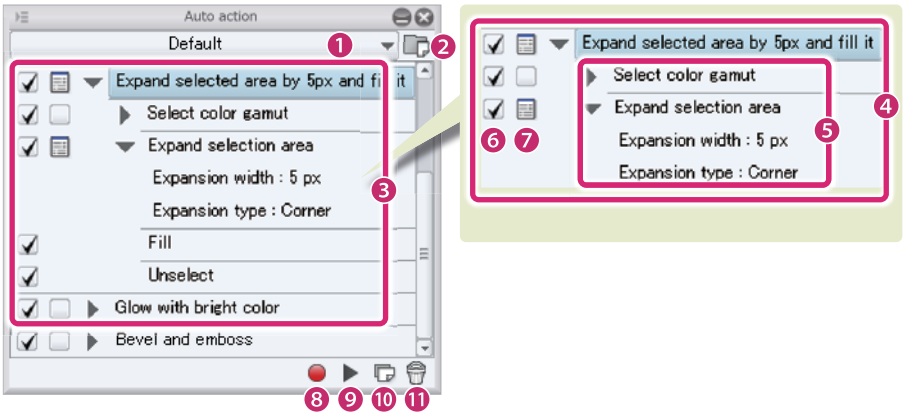
To display the [History] palette again, select [Window] menu → [History].

Auto action palette

This chapter describes the functions of the [Auto action] palette.

Functions of Auto action Palette

The [Auto action] palette allows you to record multiple operations and run these operations in one go. The recorded operations can also be run for another canvas.



(1) Switch set

Click to display a list of auto action sets and switch to the one to use.

(2) New set

Click to create a new auto action set. For how to create an auto action set, see "Creating an Auto Action Set" .

(3) Auto action list

A list of auto actions registered in the auto action set.

(4) Auto action

A setting to record multiple operations and run the recorded operations. Operations can be run by auto action. Operations recorded in the auto action can be displayed or hidden by clicking [▼].

(5) Command

An operation recorded in the auto action. To display the details configured in the dialog box at the time of recording the operation in the auto action, click [▼].

(6) Run switch

When turned off (not checked), the relevant command within the auto action is not run.

(7) Change settings switch

When turned on (checked), the dialog box for configuring settings displays at the time the relevant command is run. Once the settings are configured, execution of the auto action resumes. When turned off, the settings at the time the auto action was recorded are executed.

(8) Start to record auto action/Stop to record auto action

Records operations for the added auto action. Clicking again stops the recording.

(9) Play auto action

Click to execute the operations included in the selected auto action. When a certain command within the auto action is selected, commands from the selected one onwards are executed.

Memo

- **Double clicking a selected auto action also runs the auto action.**
- **By configuring a shortcut, you can run an auto action just by pressing the shortcut keys. For how to configure a shortcut, see "Shortcut settings [Windows]" .**

(10) Add auto action

Adds an auto action to the auto action set. For how to add an auto action, see "Add an auto action" .

(11) Delete auto action

Deletes the selected auto action or command.

Auto action Palette Menu

This section describes the functions included in the menu that displays when you click [Palette menu] on the upper left corner of the [Auto action] palette.

Button mode

Shows [Auto action] as a button. Clicking the button enables the auto action for execution.

Add auto action

Adds an auto action to the auto action set.

Delete auto action

Deletes the selected auto action.

Change auto action

Changes the name of the selected auto action.

Memo **Clicking the auto action whose name is to be changed also allows you to rename it.**

Duplicate auto action

Makes a copy of the selected auto action.

Delete command

Deletes the selected command.

Duplicate command

Makes a copy of the selected command.

Create new set

Creates a new auto action set.

Delete set

Deletes the selected auto action set.

Duplicate set

Makes a copy of the selected auto action set.

Settings of set

Renames the selected auto action set.

Start to record auto action

Starts recording the selected auto action. Execution of a command from the menu and the like is recorded in the auto action.

Play auto action

Runs the selected auto action. When a certain command within the auto action is selected, commands from the selected one onwards are run. However, commands whose [Run switch] are turned off are not run.

Memo

- **Double clicking [▼] of the auto action to run also runs the auto action.**
- **By configuring a shortcut, you can run an auto action just by pressing the shortcut keys. For how to configure a shortcut, see "Shortcut settings [Windows]" .**

Export set

Exports (saves) the content of the current auto action set as an auto action set file (extension: laf).

Import set

Imports an auto action set file (extension: laf) and registers it in the [Auto action] palette.

Important

Auto action files created with IllustStudio (extension: iaf) and auto action files created with Manga Studio 4.0 (extension: caf) cannot be imported.

Register set as material

Displays the [Material property] dialog box where you can register the selected auto action set in a [Material] palette.

[Material property] Dialog Box

(1) Material name

Input a name for the material.

(2) Location to save material

Click a folder to specify the location to save the material. The specified location is reflected in the [Tree view] of the [Material] palette.

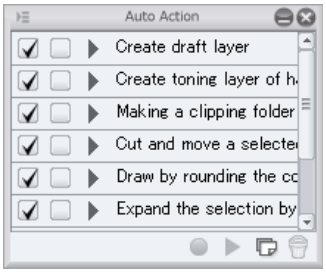
(3) Search tag

Click the tag list to specify the search tag to be displayed on the [Tag list].

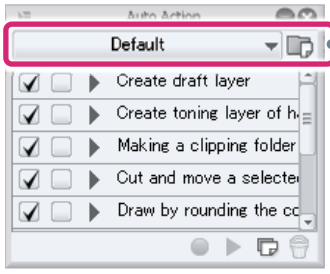
Clicking the tag with a + sign in the lower right will allow you to create a new tag.

Show action set bar

When turned on, displays the action set bar of the [Auto action] palette.


Auto Action
Create draft layer
Create toning layer of h
Making a clipping folder
Cut and move a selecte
Draw by rounding the cc
Expand the selection by

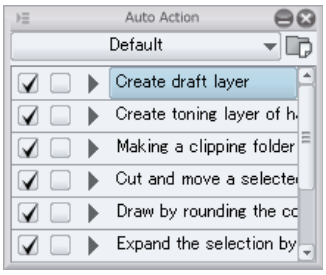
Show action setting bar: OFF



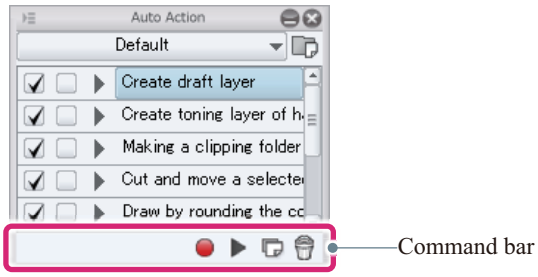
Show action setting bar: ON

Show command bar

When turned on, displays the command bar of the [Auto action] palette.



Show command bar: OFF



Show command bar: ON

Hide auto action palette

Hides the [Auto action] palette.

Memo

To display the [Auto action] palette again, select [Window] menu → [Auto action].

Operating the Auto action Palette

This section describes how to operate the [Auto action] palette.

Operating the Auto action Set

An "auto action set" is a group of multiple auto actions. You can have multiple auto action sets with auto actions in accordance with the use and frequency of use, and use them by switching with the [Switch set] on the [Auto action] palette.

Memo **To export an [Auto action] palette settings, you must export the entire auto action set.**

Creating an Auto Action Set

To create an auto action set in the [Auto action] palette, proceed as follows.

1 Create an auto action set

Click [New set] on the [Auto action] palette.

2 Configure the auto action set

On the [New set] dialog box that displays, input a name in [Set name] and click [OK].

3 The auto action set is created

The auto action set configured with the [New set] dialog box is created in the [Auto action] palette.

Memo **An auto action is added at the time the auto action set is created.**

Switching the Auto Action Set

Select the auto action set from the list displayed by clicking [Switch set].

Operating the Auto Action

An "auto action" is the settings for recording and running operations. Once you have recorded operations in an auto action, you can automatically run the recorded operations.

Add an auto action

To add an auto action to the auto action set, proceed as follows.

1 Select the auto action set

Select the auto action set to be added with an auto action from the list displayed by clicking [Switch set].

2 Add an auto action

Add an auto action to the auto action set.

(1) Click [Add auto action].

(2) An auto action is added to the list of auto actions. Input a name for the auto action and press the [Enter] key.

3 Record operations in the auto action

Record operations in the auto action.

(1) Click [Start to record auto action].

(2) Perform the operations to record in the auto action. Performed operations are displayed as a list of commands in the auto action.

(3) Click [Stop to record auto action]. This ends the recording of operations.

Memo

- **For tool and sub tool operations, only [Move layer move] and [Move selection] can be recorded. No other operations can be recorded. Furthermore, there may be palette and menu operations that cannot be recorded.**
- **Clicking [Start to record auto action] again allows you to add new commands after the currently selected command.**

Running an Auto Action

To run an auto action and operate the canvas, proceed as follows.

Memo

By configuring a shortcut, you can run an auto action just by pressing the shortcut keys. For how to configure a shortcut, see "Shortcut settings [Windows]" .

1 Play the auto action

Select the auto action to run, and run.

(1) Select the auto action to run.

(2) Click [Play auto action].

Memo

- **When a certain command within the auto action is selected, operations from the selected command onwards are run.**
- **You can also run an auto action by double clicking the name of the auto action to run.**
- **Commands whose [Run switch] are turned off are not run.**

2 The auto action is run

The auto action runs on the canvas.

Changing the Order of Auto Actions and Commands

The order in which auto actions are displayed and the order in which commands are run can be changed by drag and drop. The following example changes the display order of the auto action, as an example.

1 Select the auto action

On the [Auto action] palette, select the auto action whose display order you want to change.

Memo

- **Clicking auto actions and commands while holding down the [Ctrl] key allows you to select multiple auto actions and commands.**
- **Clicking auto actions and commands while holding the [Shift] key down, allows you to simultaneously select multiple consecutive auto actions and commands.**
- **In the case of commands, only multiple commands within the same auto action can be selected.**

2 Move the auto action

Drag and drop the auto action to the desired position. A red line is displayed in the new position.

Memo

In the case of commands, they can be moved to other auto actions. A red line is displayed at the destination of the auto action.

3 The change in the order of auto actions is complete

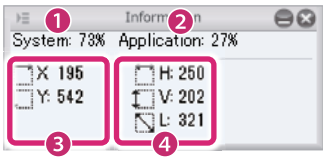
The auto action moves to the dragged and dropped position.

Information Palette

This section describes the functions of the [Information] palette.

Functions of Information Palette

Allows you to display information such as the utilization rate of the system memory and coordinate.



(1) System

Displays the memory load factor for the entire system.

Indicates the "amount of memory used by all applications" over the "amount of memory installed in your computer".

Memo

When [System] is close to 100%, the performance decreases. Quitting other running applications may lower the memory load factor for the system.

(2) Application

Displays the memory load factor for the application.

Indicates the "amount of memory currently used by Manga Studio 5.0" over the "amount of memory available to Manga Studio 5.0". The "amount of memory available to Manga Studio 5.0" is configured in [Memory size to use] on [Preferences] dialog box → [Performance].

Memo

When [Application] is close to 100%, the performance decreases. Performing any of the operations below may lower the memory load factor for the application.

- **Increase [Allocate to application] in [Preferences] dialog box → [Performance].**
- **Close unnecessary canvases.**
- **Perform [Edit] menu → [Clear memory].**

(3) Coordinate information

Displays the position of the mouse cursor on the canvas as the coordinate (X/Y).

(4) Length information

Displays the width (H), height (V), and diagonal line length (L) of the diagram when drawing a diagram such as a rectangle and circle, or creating a selection.

Information Palette Menu

The following describes the functions included in the menu that displays when you click [Palette menu] on the upper left corner of the [Information] palette.

Show memory usage

Displays/hides [System] and [Application].

Show coordinate information

Displays/hides the [Coordinate information].

Show length information

Displays/hides the [Length information].

Unit of coordinate/length

Allows you to configure the unit when displaying [Coordinate information] or [Width (H)/height (V)/diagonal line length (L)]. You can select from [Fit to unit of canvas], [cm], [mm], [in], [px], and [pt].

Hide Information palette

Hides the [Information] palette.

Memo

To display the [Information] palette again, select [Window] menu → [Information].

Explanation: Page Management [EX]

This chapter describes how to save and edit files managed by page.

Regarding Management File and Page Files

EX allows you to store a management file and multiple image files in Manga Studio 5.0 format (extension: lip) in an OS folder and manage them as a multi-page work.

(1) Management folder

The OS folder where the management file and multiple image files in Manga Studio 5.0 format (extension: lip) are stored.

(2) Management file (extension: cmc)

A file to manage multiple image files in Manga Studio 5.0 format (extension: lip).

The file takes the name of the [Management folder].

(3) Page file (extension: lip)

The image file in Manga Studio 5.0 format (extension: lip) of each page. The number of image files in Manga Studio 5.0 format to store is the same as that of the created pages.

Creating a Page File

To create a page file, proceed as follows.

Creating from the New Dialog Box

The [New] dialog box allows you to create a page file with the specified number of pages.

1 Select the command

From the [File] menu, select [New]. The [New] dialog box opens.

2 Configure the number of pages

Specify the number of pages after configuring each of the items on the dialog box.

(1) Turn on [Multiple pages].

(2) Input the number of pages in the input field of [Multiple pages].

(3) Configure [Binding point] and [Start page].

(4) Click [Browse] for [Save folder] to specify the location where the management folder will be created.

(5) Input a name for the management folder in [Management folder].

(6) Click [OK].

Memo **For details on the items of the [New] dialog box, see "[New] Dialog Box" .**

3 The page file is created

Closing the dialog box creates a page file as configured.

Creating from a Single-page File

Select [Story] menu → [Add page] with a single-page image file opened. The [Switch canvas] tab for the second page displays and each file is managed as a page.

Saving Files Created from a Single-page File

To save page files created from a single-page file, proceed as follows.

1 Select the command

Select [Story] menu → [Add page].

Memo **You can also create a page file by selecting [Story] menu → [Next Page].**

2 Configure the dialog box

The [Create page management folder] dialog box displays. Configure the items on the dialog box.

(1) Click [Browse] to specify the [Management folder location] where it will be created.

(2) Input a name for the management folder in [Management folder].

(3) Configure [Binding point] and [Start page].

(4) Click [OK].

3 The page file is saved

Closing the dialog box saves the management file and the image file of each page in the created [Management folder].

Opening a Page File

To open a page file, proceed as follows.

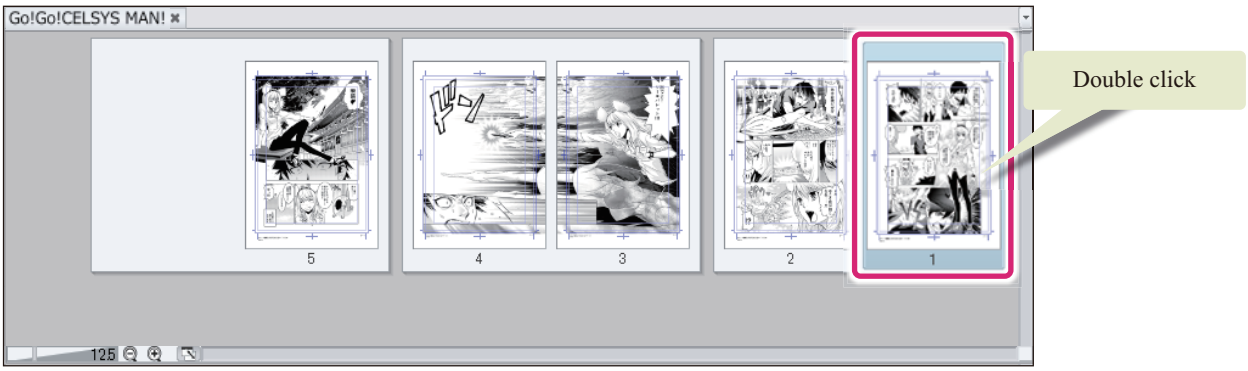
1 Select the command

Select [File] menu → [Open]. The dialog box for opening a file displays.

2 Open the page file

From the dialog box, move to the [Page folder] and specify the management file (extension: cmc) or a page file (extension: lip).

- Specifying a page file (extension (lip) opens the page file of the relevant page.
- Specifying the management file (extension: cmc) opens the [Page manager] window. To open the page file of a desired page, double click the page thumbnail.



Page manager window

Memo

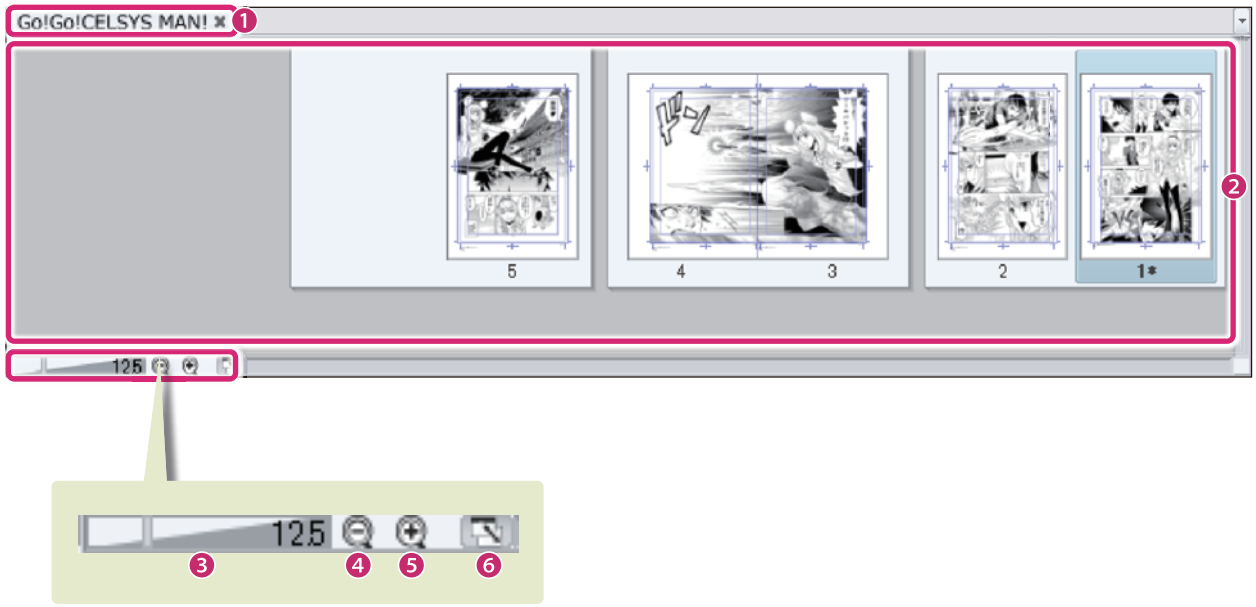
- Selecting the page file on the [Page manager] window and then selecting [Story] menu → [Open page] or [Open page with new tab] also allows you to open the page file.
- Under [File] → [Page management] on the [Preferences] dialog box, you can configure whether or not to automatically save when switching pages, and how to open files. For details, see "Preferences [Windows]" → "File" .

Page manager Window

This section describes the names and functions of each part of the [Page manager] window as well as how to open and operate the window.

Page manager Window Functions

The names and functions of each part of the [Page manager] window are as follows.



(1) Story name

Displays the title.

(2) Page list

Each page inside the book is displayed as a thumbnail. It allows you to move a displayed page as well as add/delete a page.

Memo

For details on how to operate the [Page list], see "Page manager Window Operations" .

(3) Scale up/down slider

Drag the slider to adjust the display scale of the thumbnails displayed in the [Page manager] window. Dragging to the right zooms in the thumbnails while dragging to the left zooms out the thumbnails.

(4) Zoom out

Clicking zooms out the thumbnails displayed in the [Page manager] window.

Memo

You can also zoom out the [Page manager] window by selecting [View] menu → [Zoom out].

(5) Zoom in

Clicking zooms in the thumbnails displayed in the [Page manager] window.

Memo

You can also zoom in the [Page manager] window by selecting [View] menu → [Zoom in].

(6) Fit to Navigator

When clicked, displays the thumbnails displayed in the [Page manager] window in such size as to fit them completely in the window. The size of the thumbnails changes in conjunction with that of the [Page manager] window.

Memo

- **[Fit to Navigator] the thumbnails when the [Page manager] window is displayed horizontally aligns the thumbnails horizontally.**
- **[Fit to Navigator] the thumbnails when the [Page manager] window is displayed vertically aligns the thumbnails vertically.**
- **You can also fit the [Page manager] window by selecting [View] menu → [Fit to Navigator].**

Opening the Page Manager Window

The [Page manager] window can be opened by either of the methods below:

- Specify the management file (extension: cmc) in [File] menu → [Open].
- Select [Story] menu → [Page manager] with a page file open.

Page manager Window Operations

The functions of the [Page manager] window and their operation are as follows.

Page File View

Double clicking the page thumbnail opens the page file of the relevant page.

Changed Page File

When a page file is changed, an "*" is displayed next to the page number in the [Page manager] window.

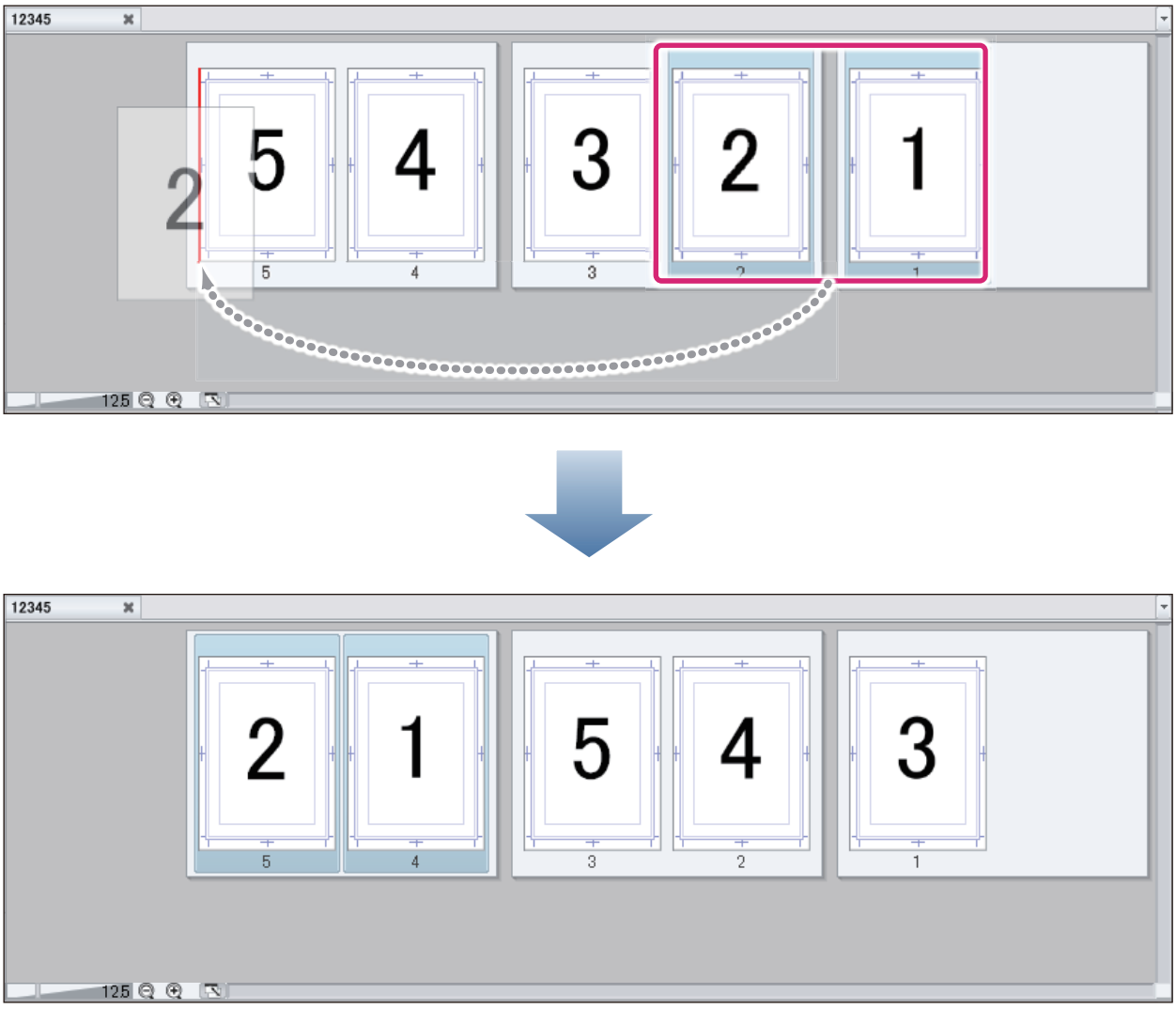
Selecting Multiple Pages

To select multiple pages in the [Page manager] window, perform as follows:

- To select multiple pages, click the pages while holding down the [Ctrl] key.
- To select a group of consecutive pages, click the pages while holding the down the [Shift] key.

Moving a Page

Dragging and dropping with a page selected moves the page. You can also select multiple pages to move them at once.



Operations Using the Story Menu

The [Page manager] window allows you to perform operations with the [Story] menu.

Memo

- **The [Story] menu is accessible from the menu that displays when you right click on the [Page manager] window.**
- **For details on the [Story] menu, see "Story Menu [EX]" .**

Regarding the Page manager Window View

To zoom in/out and scroll the [Page manager] window, proceed as follows:

- To zoom in/out the [Page manager] window view, move the mouse wheel while holding the [Ctrl] key down.
- To scroll the screen view, drag the [Page manager] window while holding the [Space] key down.

Operations from the Story Menu

When the [Page manager] window is displayed or a page file is open, you can move the displayed page, add/delete a page as well as configure story information from the [Page management] menu. For details, see "Story Menu [EX]" .

Memo **The [Story] menu is accessible from the menu that displays when you right click on the [Page manager] window.**

Explanation: Frame Cut

This chapter describes the procedures to create, draw inside and edit frame borders.

Creating a Frame Border

To create a frame border, proceed as follows.

1 Select the tool

On the [Tool] palette, select the [Figure] tool.

2 Select the method for creating the frame border

Open the [Sub tool] palette to select the method for creating the frame border.

(1) Click the [Frame border] icon.

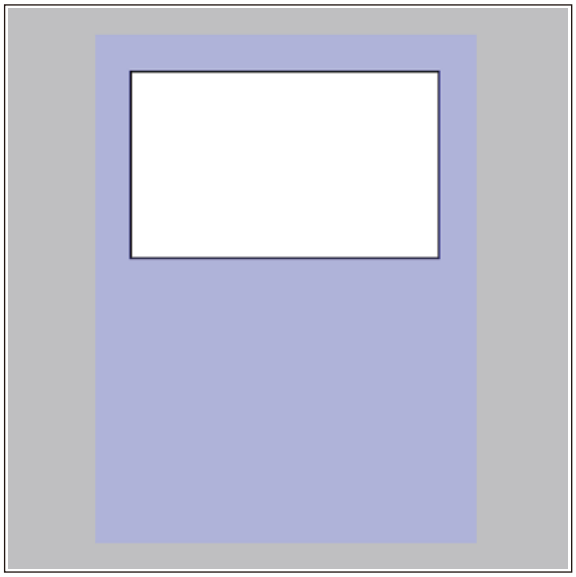
(2) Select the [Sub tool] for the frame border shape you want to create.

3 Configure the frame border

Open the [Tool property] palette and configure the frame border to draw.

4 Draw the frame border

Draw the frame border on the canvas.



Creating a frame border creates a [Frame border folder] in the [Layer] palette. A [Raster] layer and a [Fill in monochrome] layer are created in the [Frame border folder].

Furthermore, the [Layer mask] created around the frame border is displayed in violet.

Memo

- **When using [Polyline frame], the frame border drawing completes when you click the starting point, or double click.**
- **To hide the [Layer mask] area, configure [Enable mask] on the [Layer] palette. For details, see "Functions of Layer Palette" .**

Drawing inside a Frame Border

To draw inside a frame border, proceed as follows.

1 Select the drawing layer

On the [Layer] palette, select the [Raster] layer below the [Frame border folder].

2 Draw inside the frame border

Drawing on the selected [Raster] layer keeps your drawing inside the frame border.

Memo

- **Moving a [Raster] layer outside of the [Frame border folder] to below the [Frame folder] allows you to place the drawing inside the frame border.**
- **If you want to create an image that runs over the frame border, move the layer above the [Frame border folder]. In this way, you will be able to place an image running over the frame border.**

Editing a Frame Border

This section describes how to edit a frame border once created.

Transforming a Frame Border

To transform a frame border, proceed as follows.

Memo

The procedure here is described with the outside of the [Layer mask] hidden.
To hide the outside of the [Layer mask] area, configure [Enable mask] on the [Layer] palette. For details, see "Functions of Layer Palette" .

1 Select the Frame border folder

On the [Layer] palette, select the [Frame border folder] to edit.

2 Select the tool

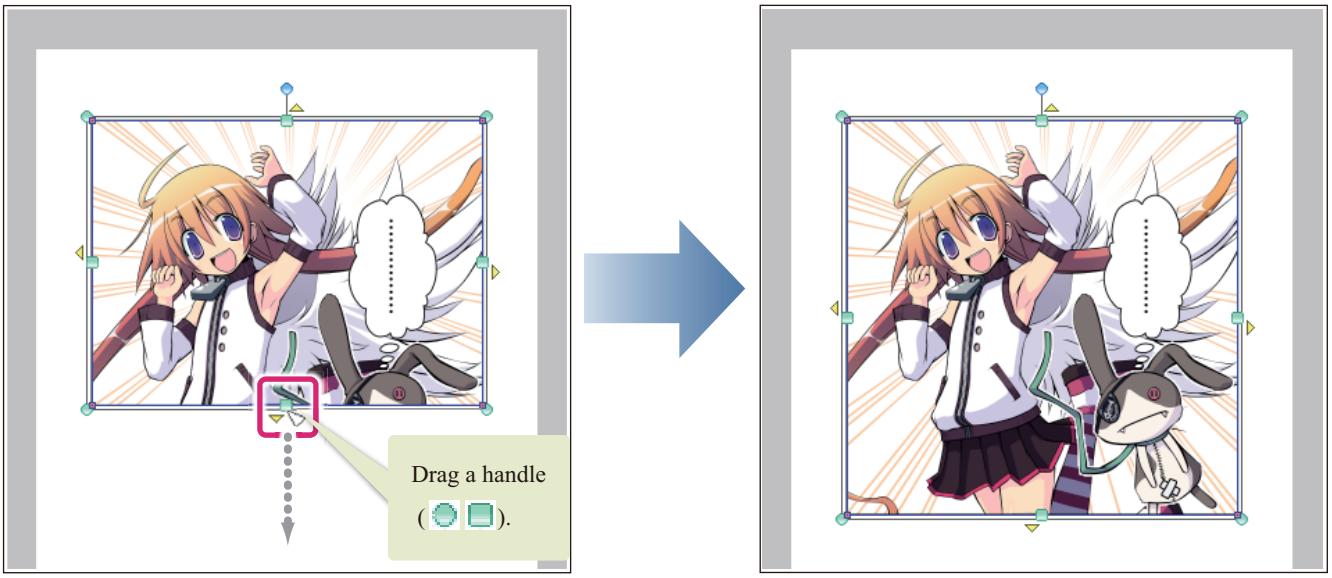
On the [Tool] palette, select the [Operation] tool.

3 Select the sub tool

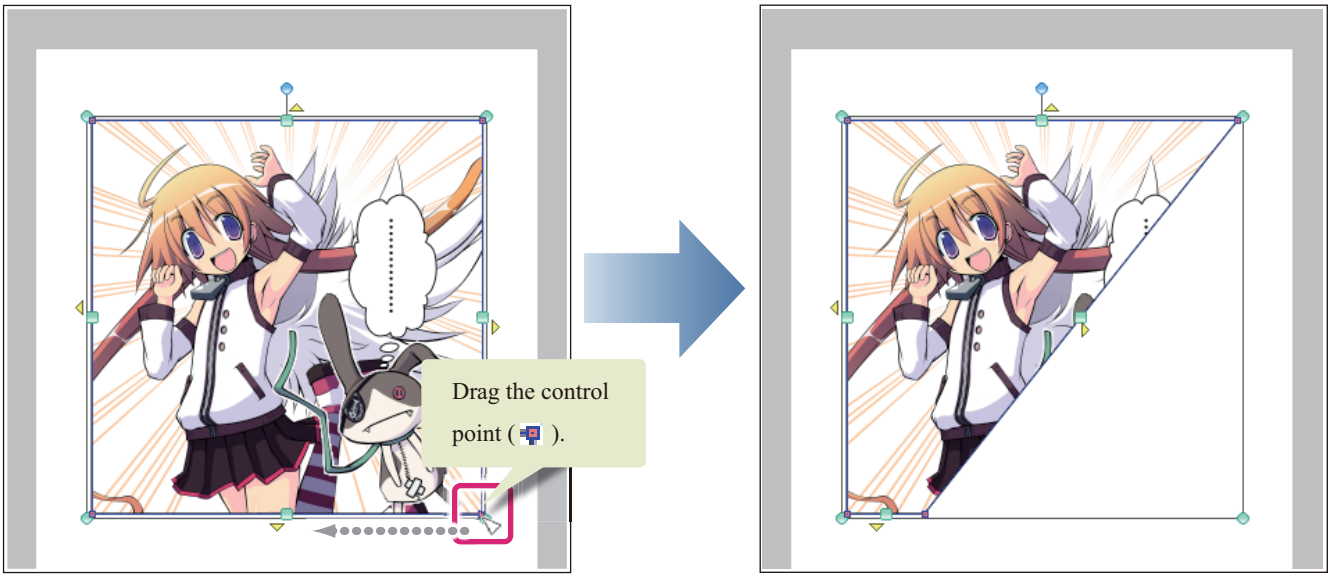
Open the [Sub tool] palette to select [Object].

4 Transform the frame border

Handles are displayed on the frame border. Dragging a handle transforms the frame border.



Dragging a control point of the frame border allows you to transform the frame border together with the vertex.



Memo

- You can select multiple control points. For details on how to select, see "Selecting Multiple Control Points" .
- The [Correct line] tool allows you to edit control points and lined. For details on how to operate, see "Editing with the Correct line Tool" .

Moving a Frame Border

To move a frame border, proceed as follows.

Memo

The procedure here is described with the outside of the [Layer mask] hidden.
To hide the outside of the [Layer mask] area, configure [Enable mask] on the [Layer] palette. For details, see "Functions of Layer Palette" .

1 Select the Frame border folder

On the [Layer] palette, select the [Frame border folder] to edit.

2 Select the tool

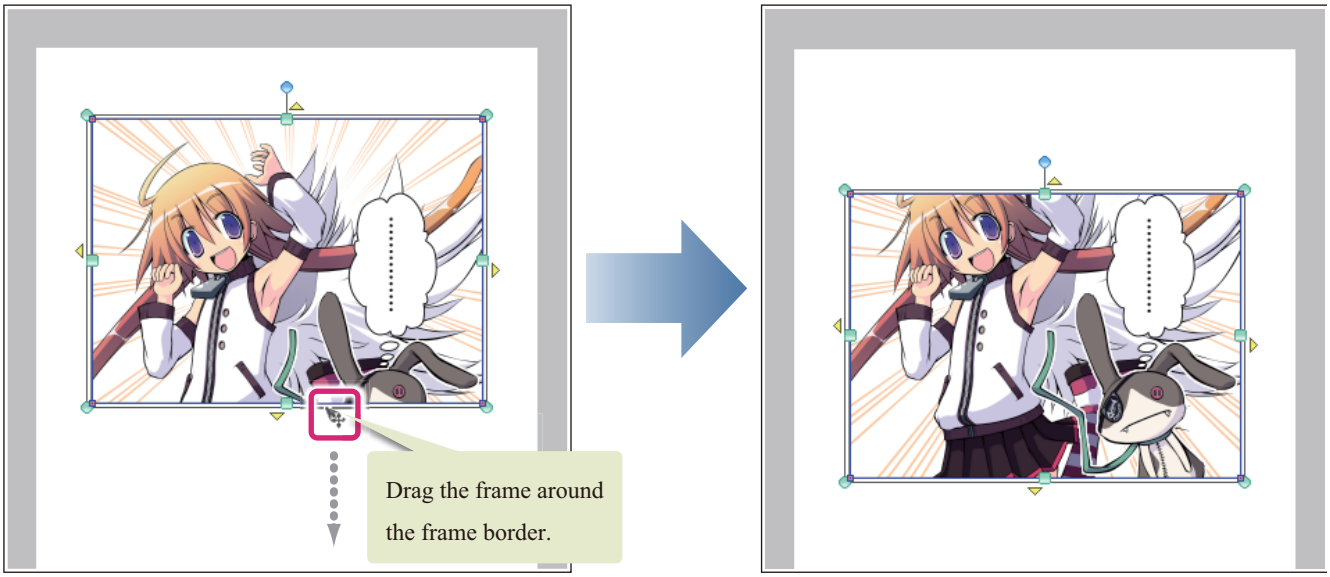
On the [Tool] palette, select the [Operation] tool.

3 Select the sub tool

Open the [Sub tool] palette to select [Object].

4 Move the frame border

Place the mouse cursor over the frame surrounding the frame border. Dragging the frame moves the frame border.



Memo

Selecting [Move layer] in step 3 also allows you to move the frame border.

Rotating a Frame Border

To rotate a frame border, proceed as follows.

1 Select the Frame border folder

On the [Layer] palette, select the [Frame border folder] to edit.

2 Select the tool

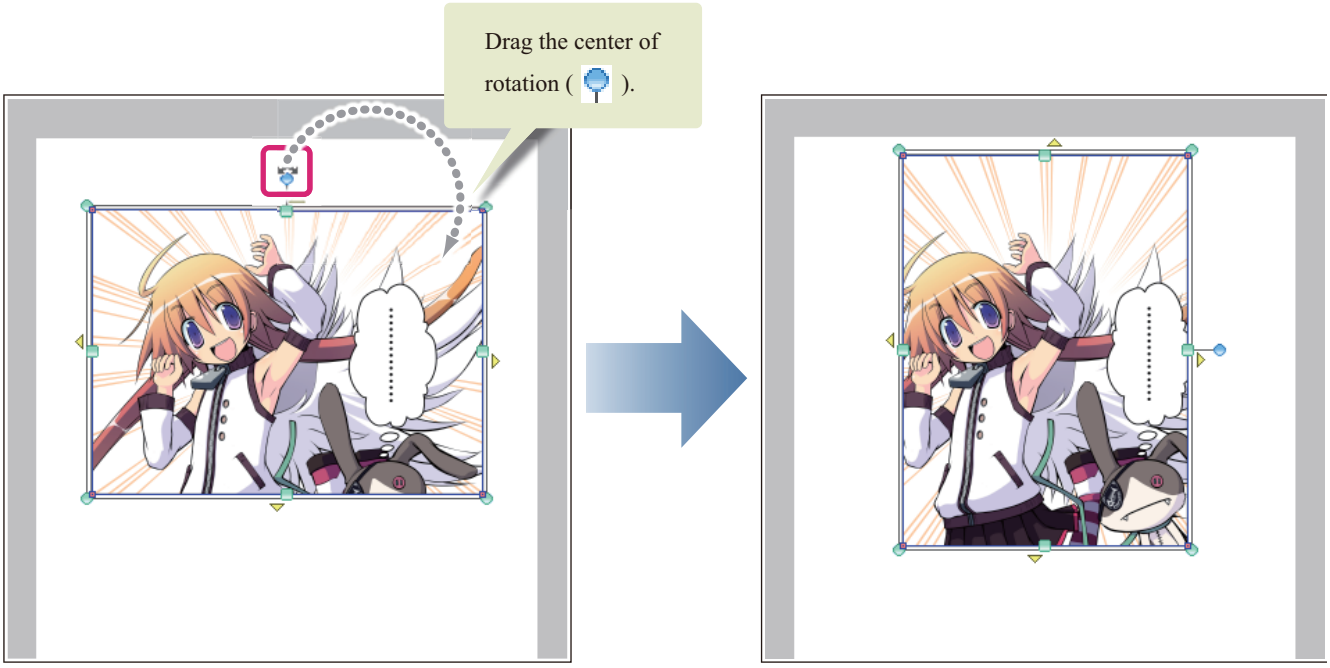
On the [Tool] palette, select the [Operation] tool.

3 Select the sub tool

Open the [Sub tool] palette to select [Object].

4 Rotate the frame border

Place the mouse cursor on the [center of rotation]. Dragging the center of rotation rotates the frame border.



Dividing a Frame Border

A frame border can be divided using the [Divide frame folder] sub tool or [Divide frame border equally] dialog box.

Dividing a frame border by [Divide frame folder]

This section describes how to divide a frame border using the [Divide frame folder] sub tool.

Memo

- **The [Divide frame folder] sub tool can also divide frames created using the [Material] palette as well as frames created using sub tools.**
- **The procedure here is described with the outside of the [Layer mask] hidden. To hide the outside of the [Layer mask] area, configure [Enable mask] on the [Layer] palette. For details, see "Functions of Layer Palette" .**

1 Select the tool

On the [Tool] palette, select the [Figure] tool.

2 Select the sub tool

Open the [Sub tool] palette to select [Divide frame folder].

Memo

Selecting the [Divide frame border] sub tool is allows you to divide only frame borders, without changing the folder structure of [Frame border folder] after division.

3 Configure the method for dividing the frame border

Open the [Tool property] palette and configure how to divide the frame border.

(1) Select the method for dividing the frame border in [Shape of curve]. In this example, [Straight Line] is selected.

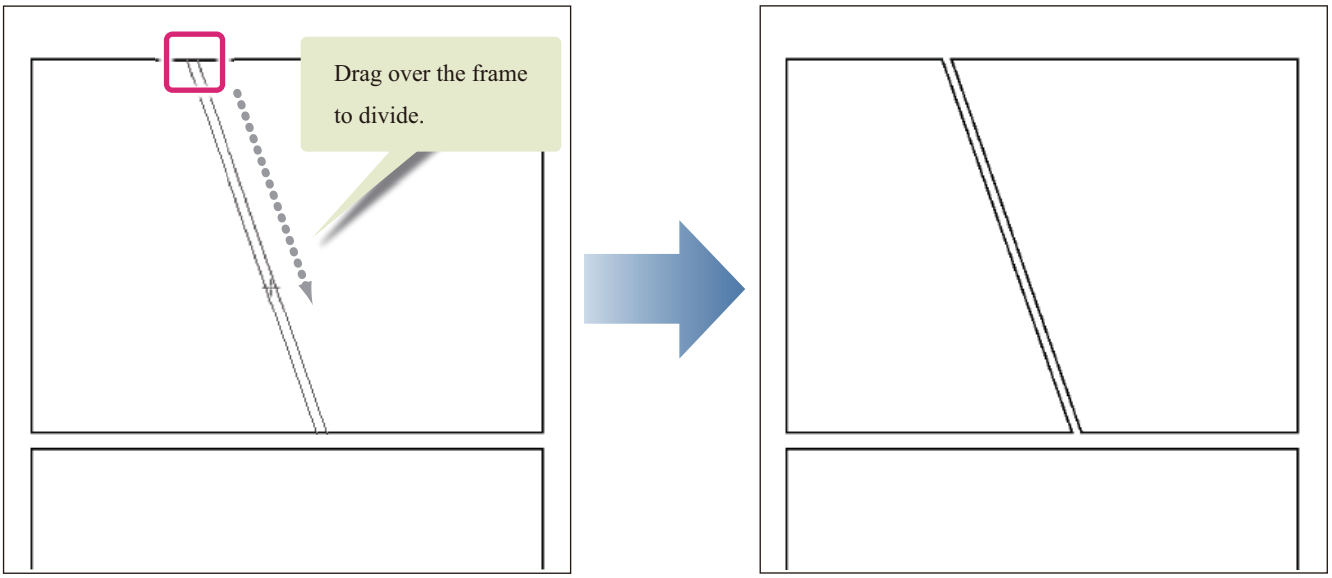
(2) In [Divide folder], select how to create the frame border folder and the like. In this example, the [Duplicate layer] is selected.

Memo

For how to configure the method for dividing frame borders, see "Cut border" in "Manga Studio 5.0 Tool Setting Guide".

4 Divide the frame border

Drag over the frame to divide. A preview of the frame border displays as soon as you start dragging. Stop dragging upon reaching the opposite side of the frame.



Memo **The way a frame border is divided varies depending on the item selected for [Shape of curve] on the [Tool property] palette.**

Divide frame border equally

Selecting [Layer] menu → [Ruler - Frame] → [Divide frame border equally] when [Frame border folder] is selected, displays the [Divide frame border equally] dialog box. In the dialog box, you can specify the number of divisions of frame borders, directions of the divided sides, etc. to divide the frame border equally.

Memo **The procedure here is described with the outside of the [Layer mask] hidden. To hide the outside of the [Layer mask] area, configure [Enable mask] on the [Layer] palette. For details, see "Functions of Layer Palette" .**

1 Select the frame border

On the [Layer] palette, select the [Frame border folder] to divide.

2 Select the command

Select [Layer] menu → [Ruler - Frame] → [Divide frame border equally]. [Divide frame border equally] dialog box displays.

3 Configure the dialog box

In the dialog box, you can specify the number of divisions of frame borders, directions of the divided sides, etc.

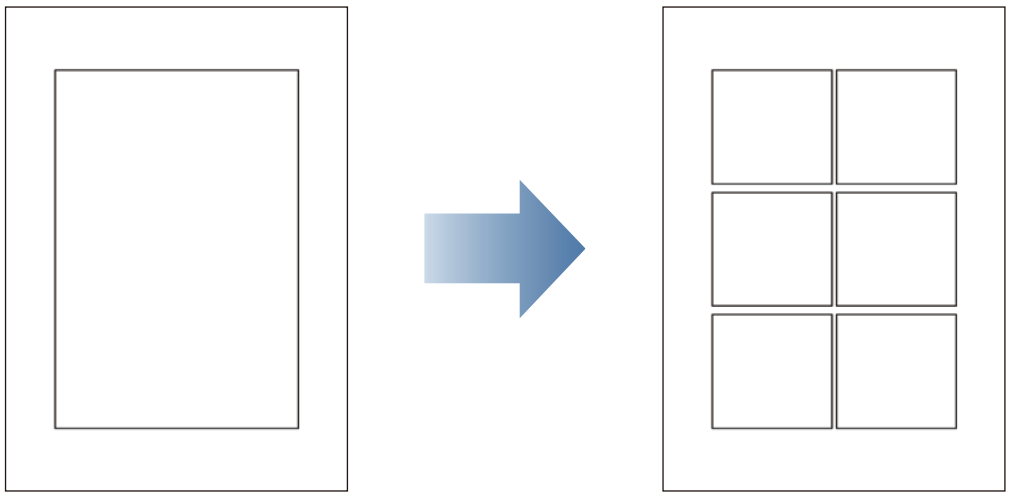
(1) Specify the number of divisions of frame borders, directions of the divided sides, and folder structure after division.

(2) Click [OK].

Memo **For details on the [Divide frame border equally] dialog box, see "Divide frame border equally" .**

4 The frame border is divided

The frame border is divided as specified in the dialog box.



Enlarging a Frame Border (Bleed Width)

This section describes how to enlarge a frame border up to the paper edge or adjacent frame border by using handles, which you can use for creating a bleed frame.

Memo

The procedure here is described with the outside of the [Layer mask] hidden.
To hide the outside of the [Layer mask] area, configure [Enable mask] on the [Layer] palette. For details, see "Functions of Layer Palette" .

1 Select the tool

On the [Tool] palette, select the [Operation] tool.

2 Select the sub tool

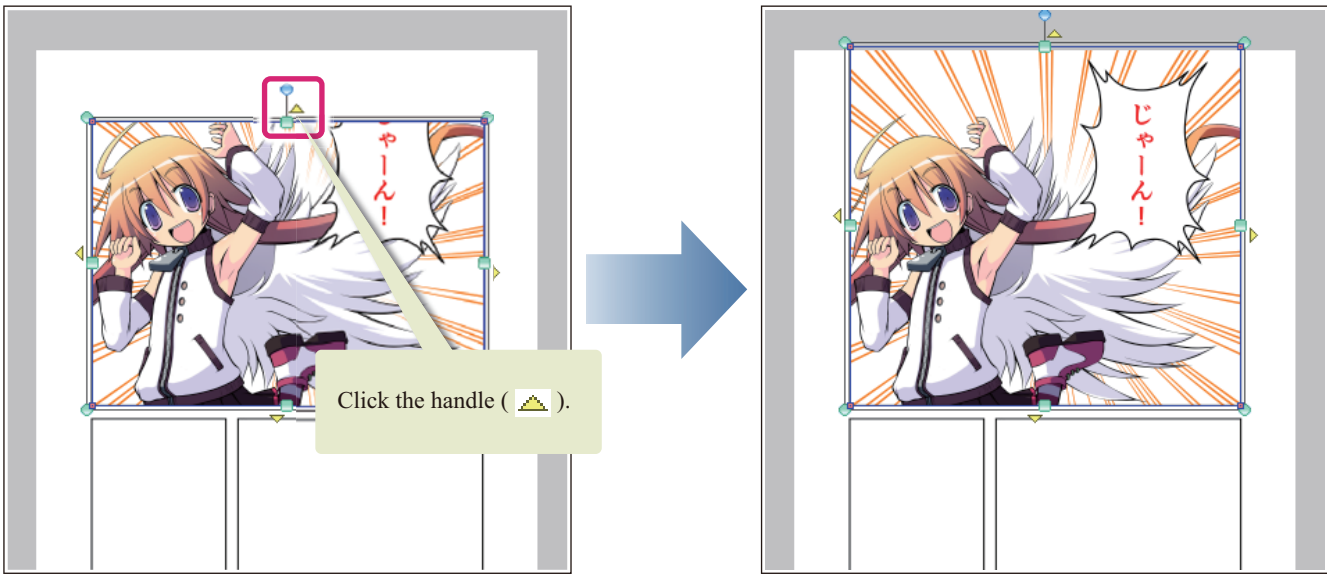
Open the [Sub tool] palette to select [Object].

3 Select the frame

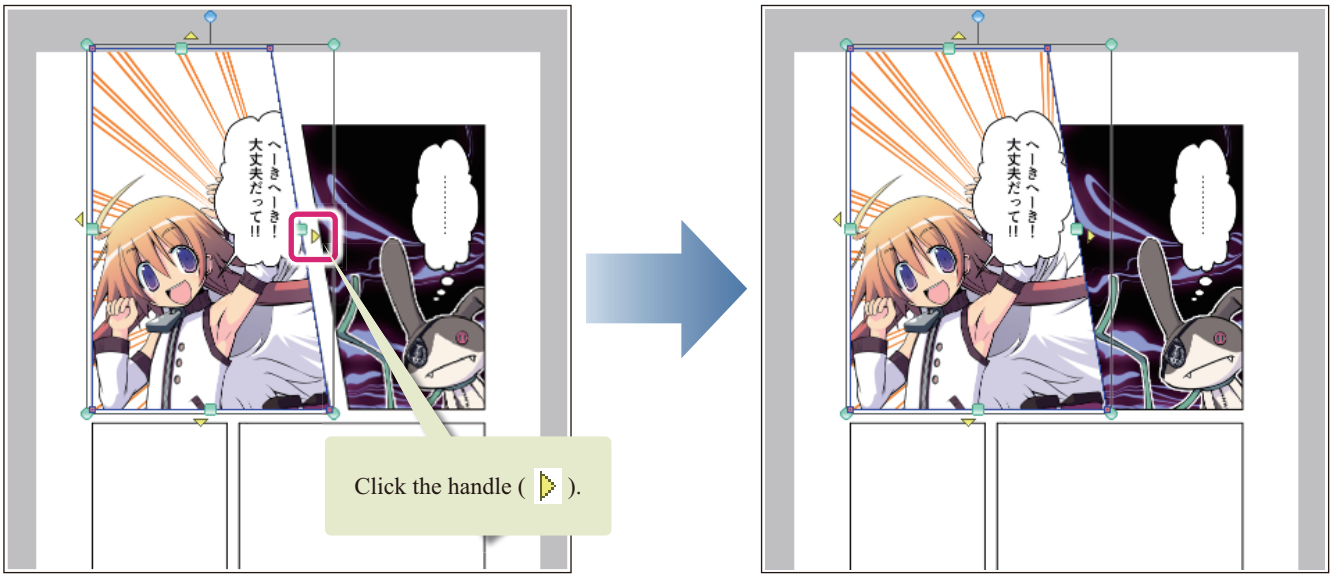
On the [Layer] palette, select the frame border to enlarge.

4 Enlarge the frame

When handles display around the selected frame border, click the triangular handle on the side you want to enlarge. The clicked frame border side expands up to canvas edge.



Clicking the triangular handle on a side neighboring another frame, expands the frame up to the edge of the other frame, leaving no margin between the frames.



Changing the Thickness and/or Color of a Frame Border

Changing the thickness and color of a frame border is possible from the [Tool property] palette. For details on how to change, see "Frame Border" in "Manga Studio 5.0 Tool Setting Guide".

Explanation: Balloons and Text

This chapter describes how to create and edit balloons and text.

Balloon

This section describes how to create and edit balloons.

Creating a Balloon

The following describes the procedure to create a balloon and place text in it.

Drawing a Balloon

To draw a balloon by configuring the line width, color and the like, proceed as follows.

1 Select the tool

On the [Tool] palette, select the [Text] tool.

2 Select the sub tool

Open the [Sub tool] palette to select a sub tool for drawing the balloon. In this example, [Ellipse Balloon] is selected.

3 Configure the tool property

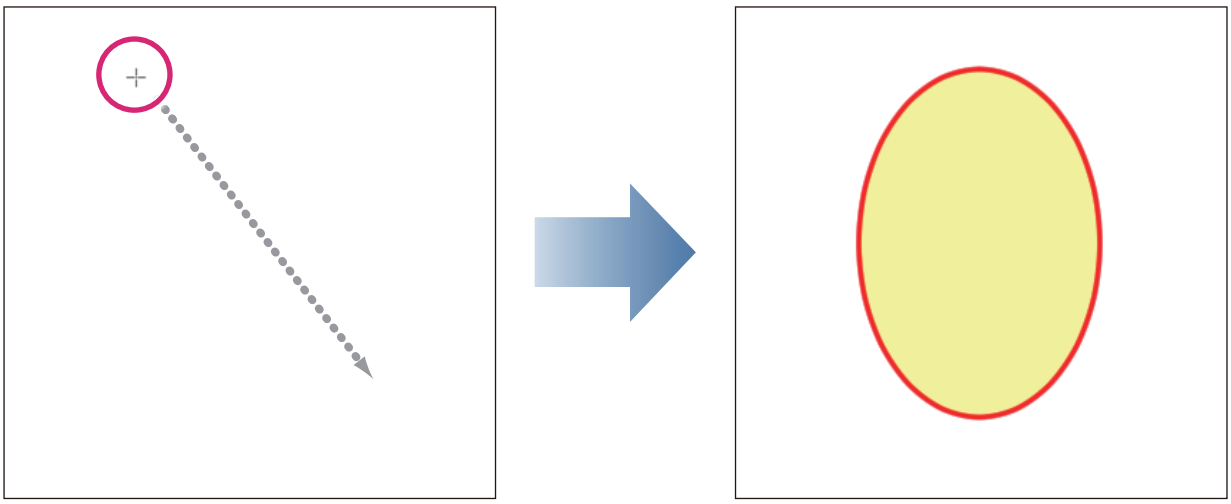
On the [Tool property] palette, configure the shape, line width and the like for the balloon.

4 Configure the balloon's line and color

Configure the sub drawing color as the balloon's color. Configure the main drawing color as the balloon's line color.

5 Draw the balloon

Drag on the canvas. The balloon is drawn and a [Balloon] layer is created at the same time.



Memo

- **To add a balloon to an already created [Balloon] layer you have selected, configure [Add to selected layer] for [How to add] on the [Sub tool detail] palette. In this case, a new layer will not be added. Furthermore, drawing overlapped balloons allows you to draw a series of linked balloons.**
- **If [Combine with the text in the drawing area] under [Create balloon] on the [Sub tool detail] palette is turned on, drawing a balloon over a text allows you to place both text and balloon on the same layer independently of the selected layer and [Sub tool detail] palette settings. Moving the balloon with the [Object] sub tool also moves the text along with it.**

Attaching a Tail to a Balloon

To add a tail to a balloon, proceed as follows.

1 Select the sub tool

Open the [Sub tool] palette to select a tail sub tool. In this example, [Balloon tail] is selected to create a normal balloon tail.

2 Configure the tool property

Configure the method for drawing the tail, its width and the like.

(1) In [How to bend], configure how to draw the balloon tail.

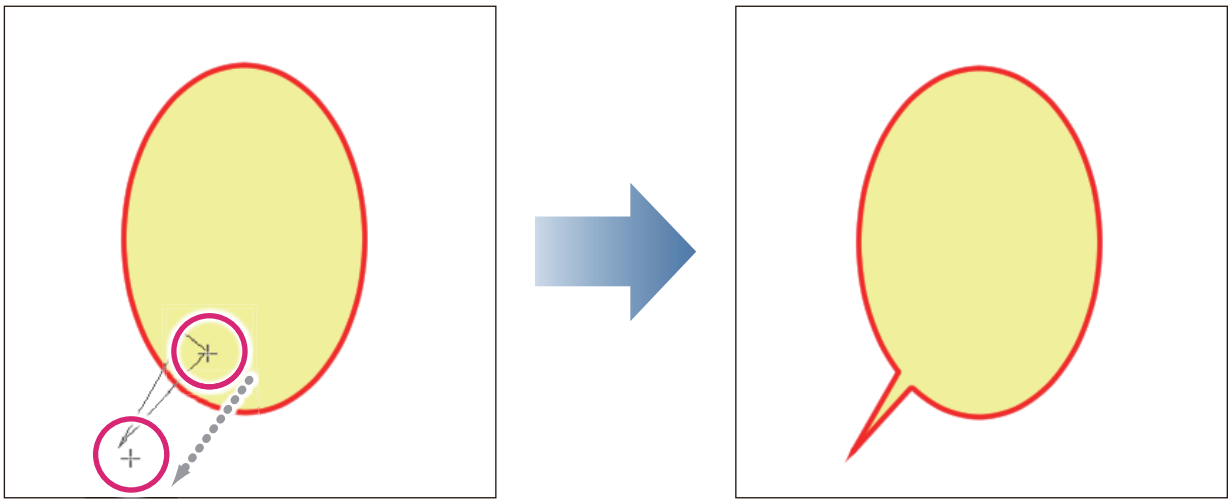
(2) In [Width of tail], configure the tail width at its base.

3 Draw the tail

How to draw the tail varies depending on the [How to bend] setting.

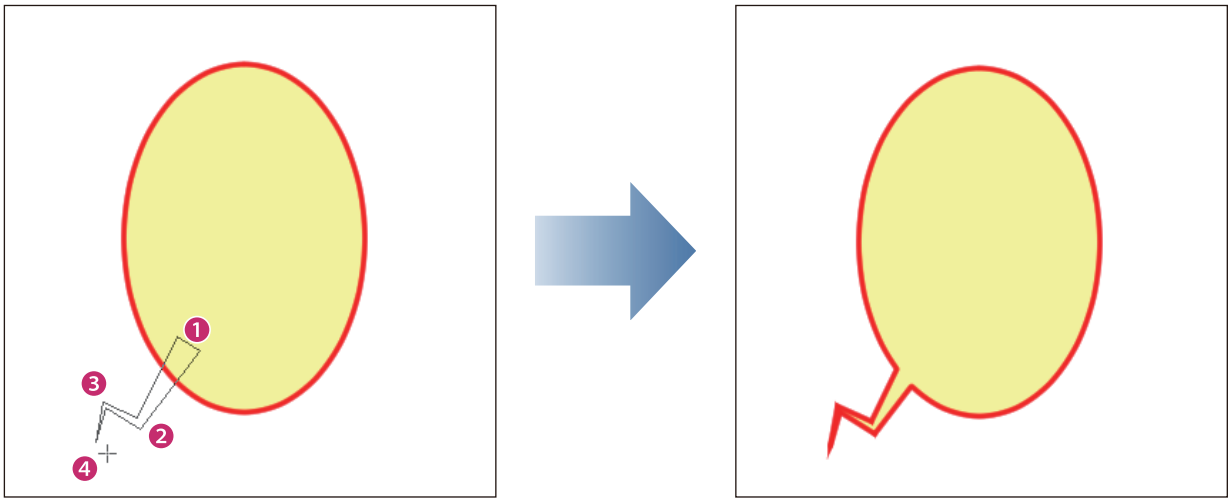
Straight line

Drag over the canvas from the starting point to the end point.



Polyline

Draw as described below, from the starting point to the end point.

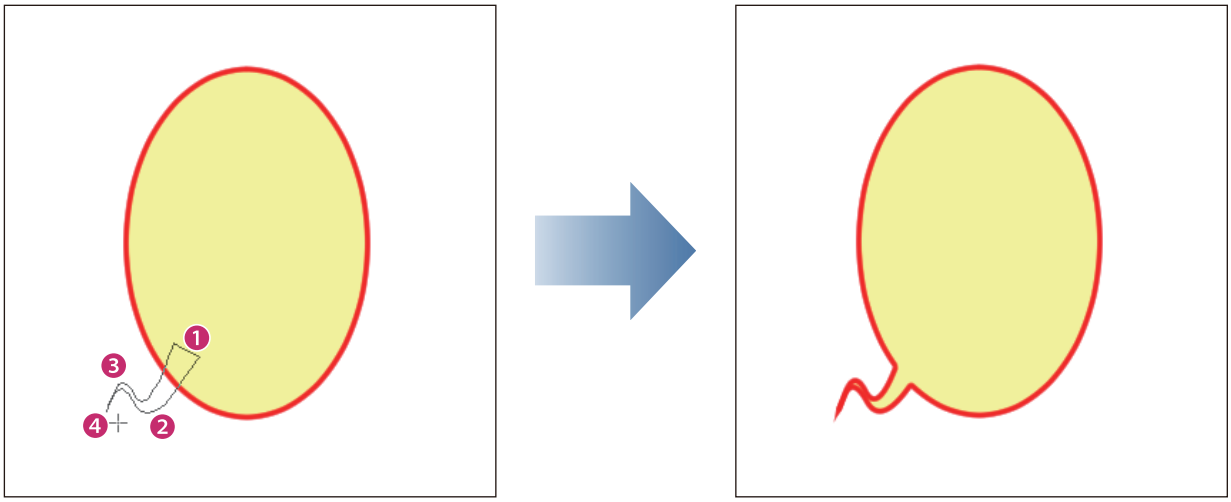


Click the canvas at points (1) to (3) to specify multiple points.

Double clicking at the end point creates a polyline connecting the points specified above.

Spline

Draw as described below, from the starting point to the end point.



Click the canvas at points (1) to (3) to specify multiple points.

Double clicking at the end point creates a curved tail connecting the points specified above.

Editing a Balloon

This section describes how to edit a balloon once created.

Memo

For how to input text into a balloon, see "Text" .

Transforming a Balloon

To transform a balloon, proceed as follows.

1 Select the balloon layer

On the [Layer] palette, select the [Balloon] layer to edit.

2 Select the tool

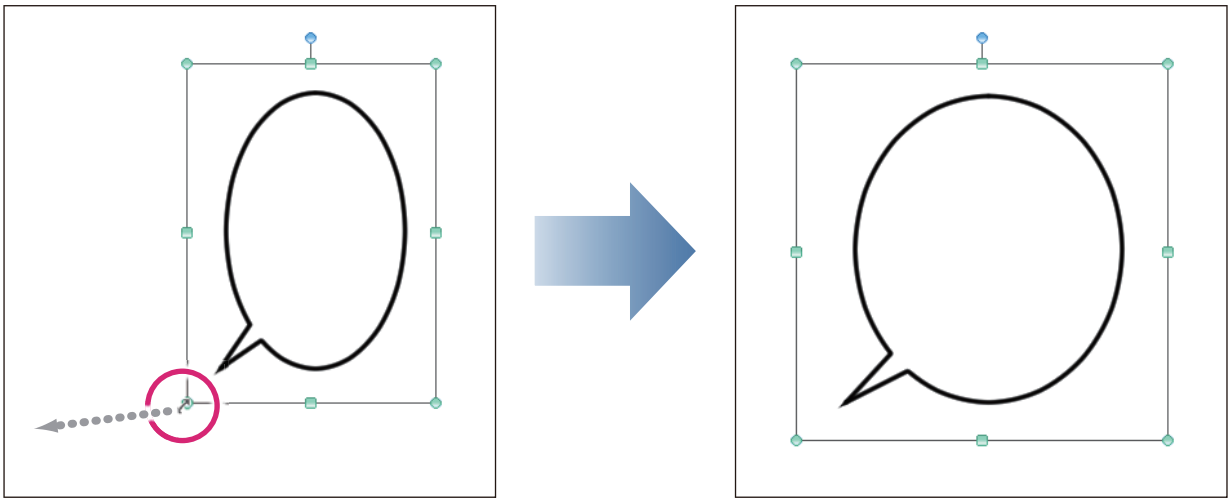
On the [Tool] palette, select the [Operation] tool.

3 Select the sub tool

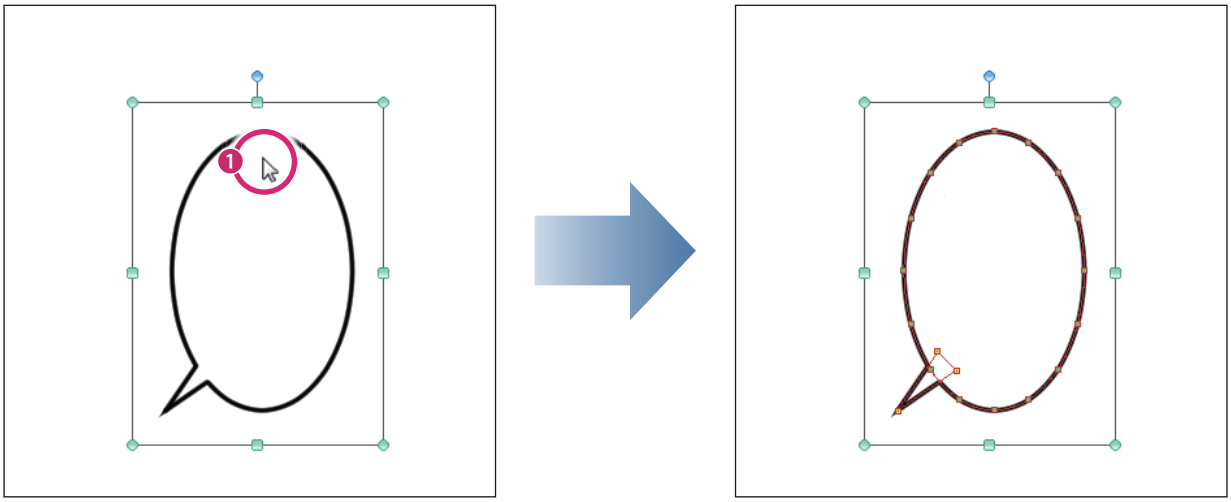
Open the [Sub tool] palette to select [Object].

4 Transform the balloon

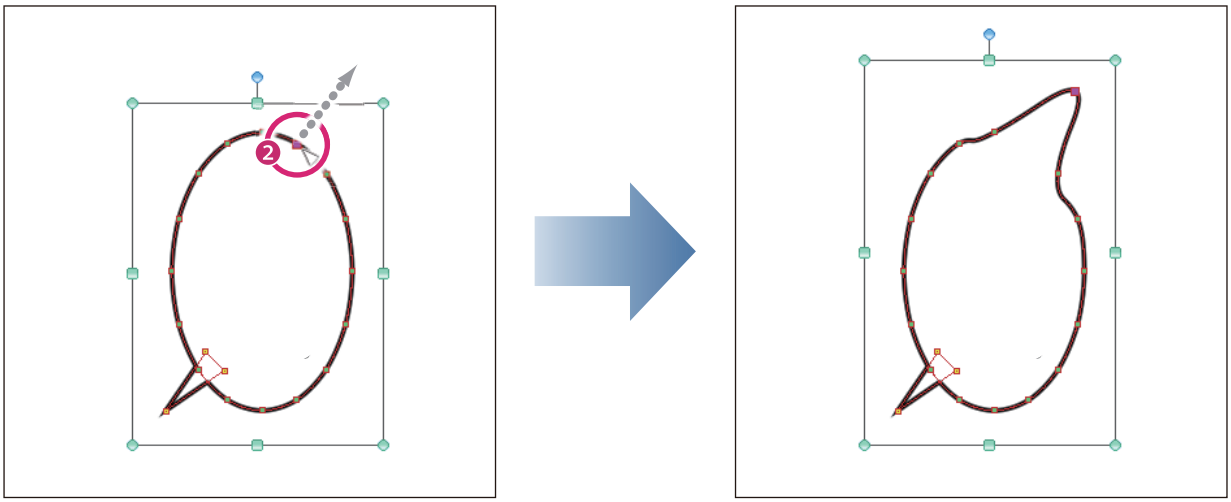
Handles display around the balloon. Dragging a handle transforms the balloon.



You can also display handles on the balloon's line to transform.



(1) Click inside the balloon with the handles displayed. Control points display on the balloon's line.



(2) Dragging the additionally displayed control points allows you to freely transform the balloon.

Memo

- Clicking inside the balloon tail allows you to edit only the tail.
- [Operation] on the [Tool property] palette allows you to select how to transform the balloon.
- You can select multiple control points. For details on how to select, see "Selecting Multiple Control Points" .
- The [Correct line] tool allows you to edit control points and lined. For details on how to operate, see "Editing with the Correct line Tool" .

Moving a Balloon

To move a balloon, proceed as follows.

1 Select the tool

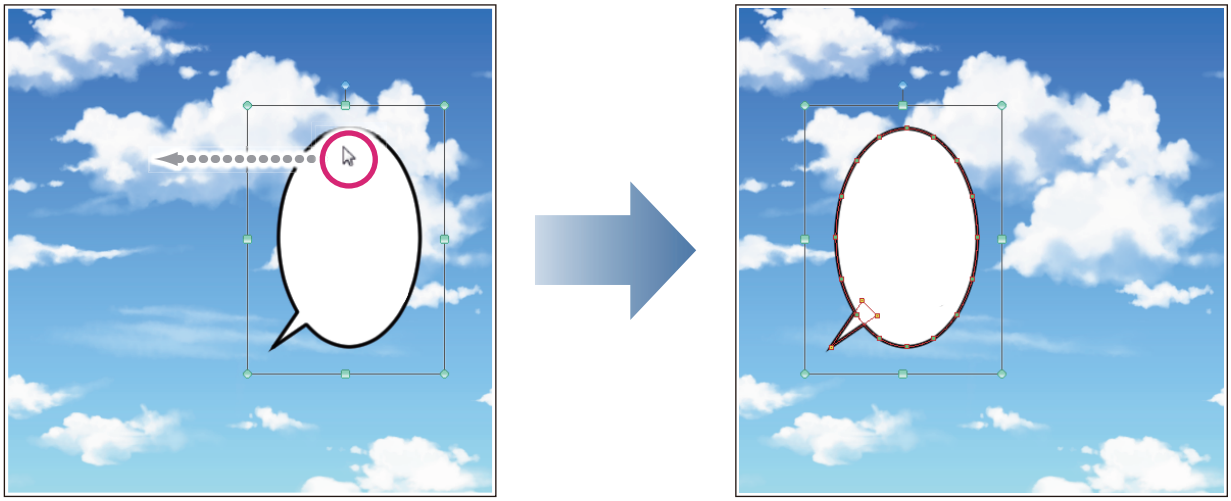
On the [Tool] palette, select the [Operation] tool.

2 Select the sub tool

Open the [Sub tool] palette to select [Object].

3 Move the balloon

Place the mouse cursor inside the balloon. Dragging the balloon moves it.



Memo

- **To only move the tail, click inside the tail.**
- **Selecting [Move layer] in step 1 also allows you to move the balloon.**
- **To select multiple balloons, click the additional balloons sequentially while holding the [Shift] key down.**

Rotating a Balloon

To rotate a balloon, proceed as follows.

1 Select the balloon layer

On the [Layer] palette, select the [Balloon] layer you want to edit.

2 Select the tool

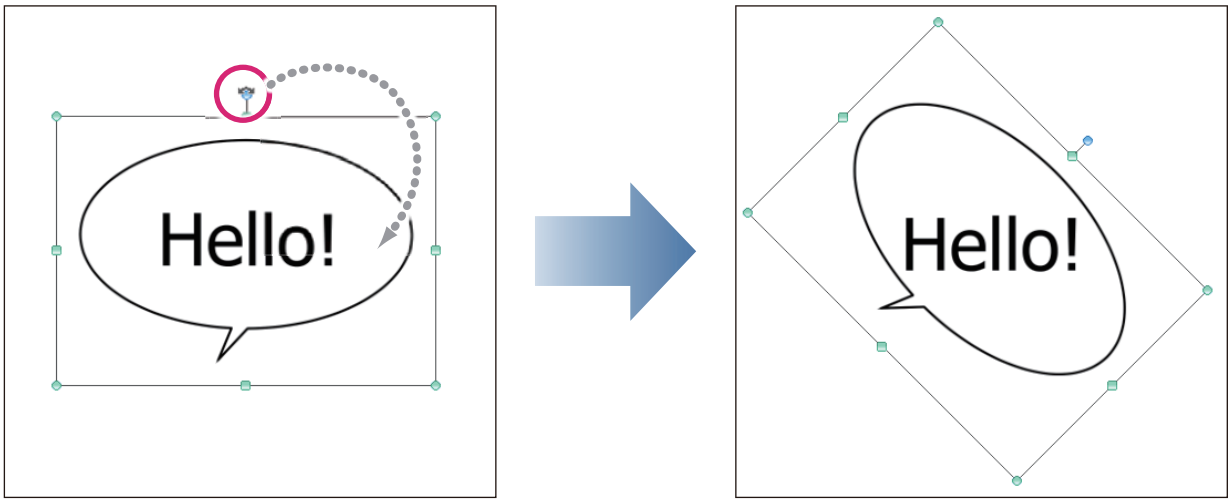
On the [Tool] palette, select the [Operation] tool.

3 Select the sub tool

Open the [Sub tool] palette to select [Object].

4 Rotate the balloon

Place the mouse cursor on the [center of rotation]. Dragging the center of rotation rotates the balloon.



Memo

- **To only rotate the tail, click inside the tail.**
- **To select multiple balloons, click the additional balloons sequentially while holding down the [Shift] key.**

Changing the Thickness and/or Color of a Balloon's Line

Changing the thickness and color of a balloon's line is possible from the [Tool property] palette. For details on how to change, see "Balloons" in "Manga Studio 5.0 Tool Setting Guide".

Text

This section describes how to input and edit text.

Inputting Text

To input and lay out text, proceed as follows.

1 Select the tool

On the [Tool] palette, select the [Text] tool.

2 Select the sub tool

Open the [Sub tool] palette to select [Text].

3 Configure the tool property

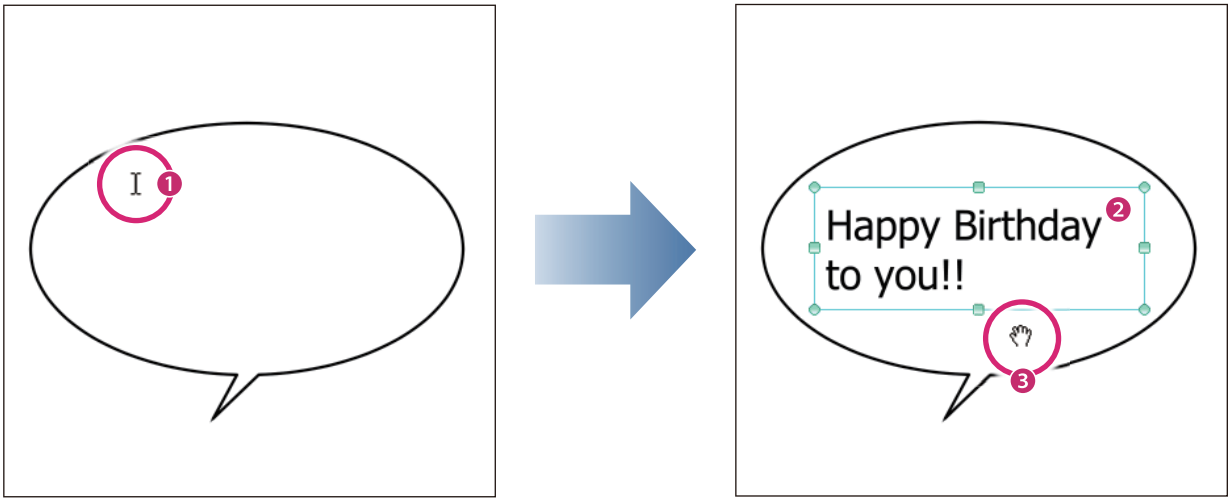
On the [Tool property] palette, configure the settings to input text.

Memo

- **For details on how to configure the tool property, see "Text Tool Properties" .**
- **The tool property settings can also be configured after laying out the text. For how to edit, see "Editing Text" .**

4 Input the text

Input the text by following the procedure below.



(1) Click the canvas at the desired position to start inputting text.

(2) Input the text.

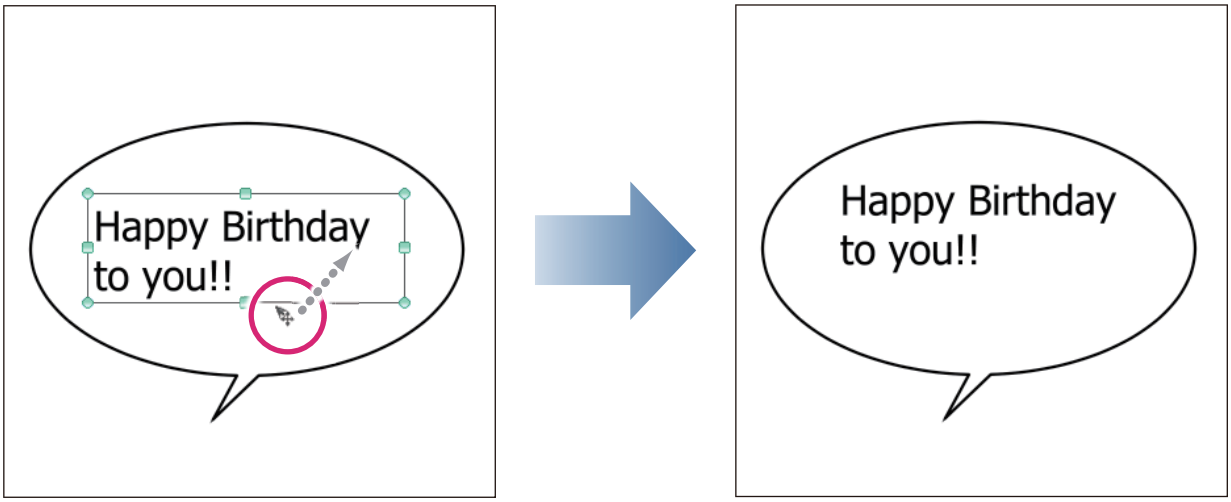
(3) Click outside the handle around the input text to commit the input.

Memo

Dragging a handle around the input text allows you to scale up/down the text.

5 Adjust the position of the text

Dragging the canvas allows you to adjust the position of the text.



Editing Text

This section describes how to edit an input text.

Editing and Re-inputting Text

To edit and re-input text, proceed as follows.

1 Select the tool

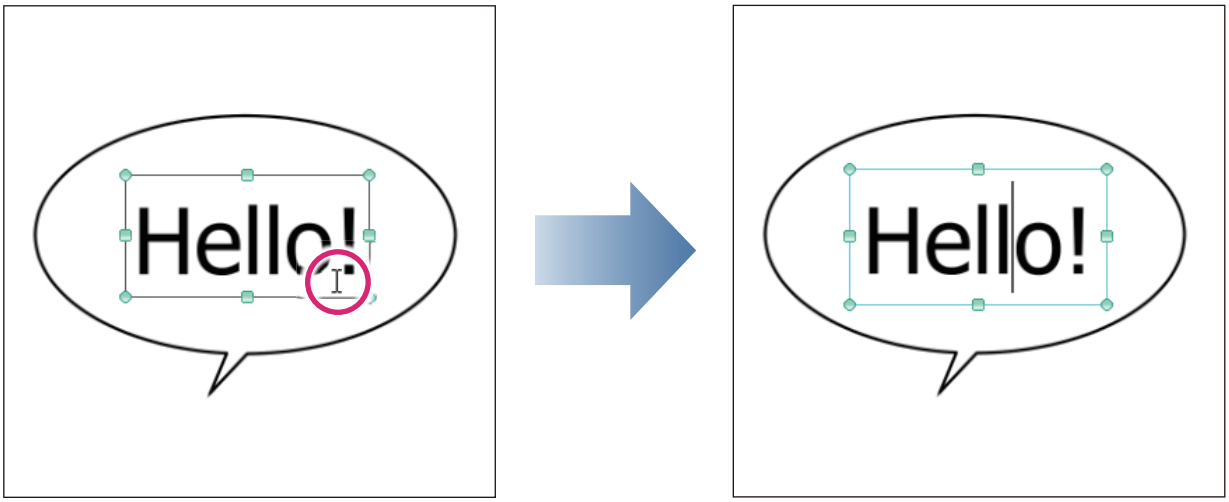
On the [Tool] palette, select the [Text] tool.

2 Select the sub tool

Open the [Sub tool] palette to select [Text].

3 Edit and re-input text

Click above the letter you want to edit. Settings related to text input display on the [Tool property] palette, allowing you to edit and re-input the text.



Memo

For details on how to configure the tool property, see "Text Tool Properties" .

Changing the Text Color

To change the text color, proceed as follows.

1 Select the tool

On the [Tool] palette, select the [Text] tool.

2 Select the sub tool

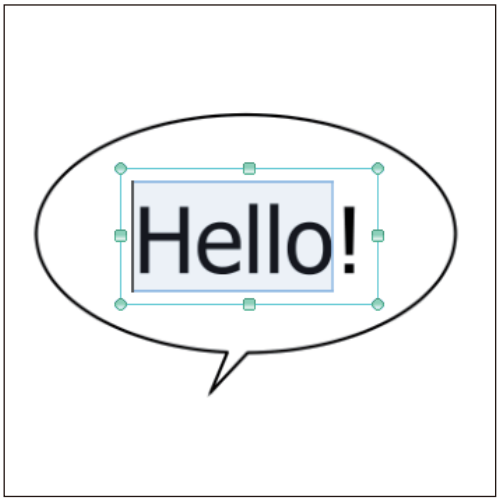
Open the [Sub tool] palette to select [Text].

3 Place text into editing mode

Click above the letter you want to edit. You can edit and/or re-input.

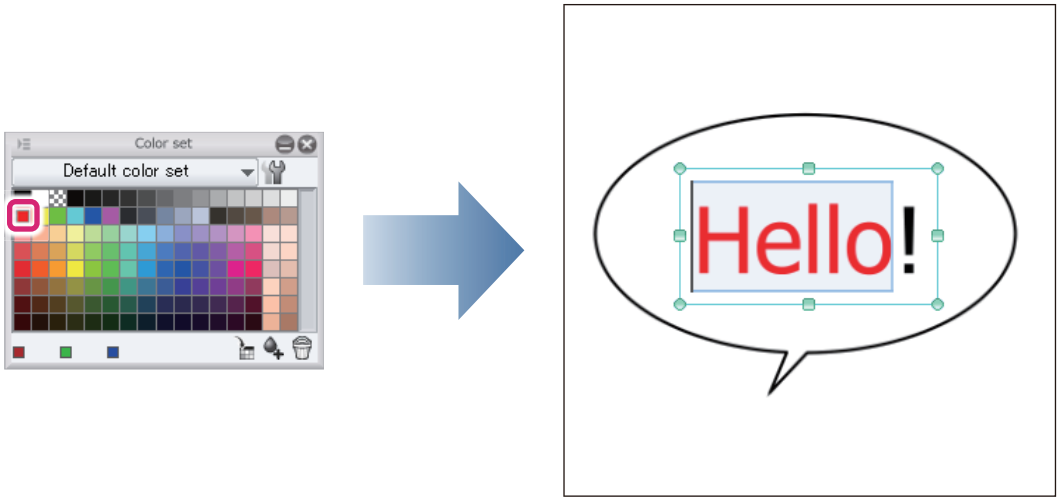
4 Select the letters

Select the letters whose color you want to change.



5 Change the text color

On a color palette, select a drawing color. The text color changes to that selected.



Changing the Position and Size of the Text

The position and size of the letters can be adjusted with [Object] of the [Operation] tool.

1 Select the tool

On the [Tool] palette, select the [Operation] tool.

2 Select the sub tool

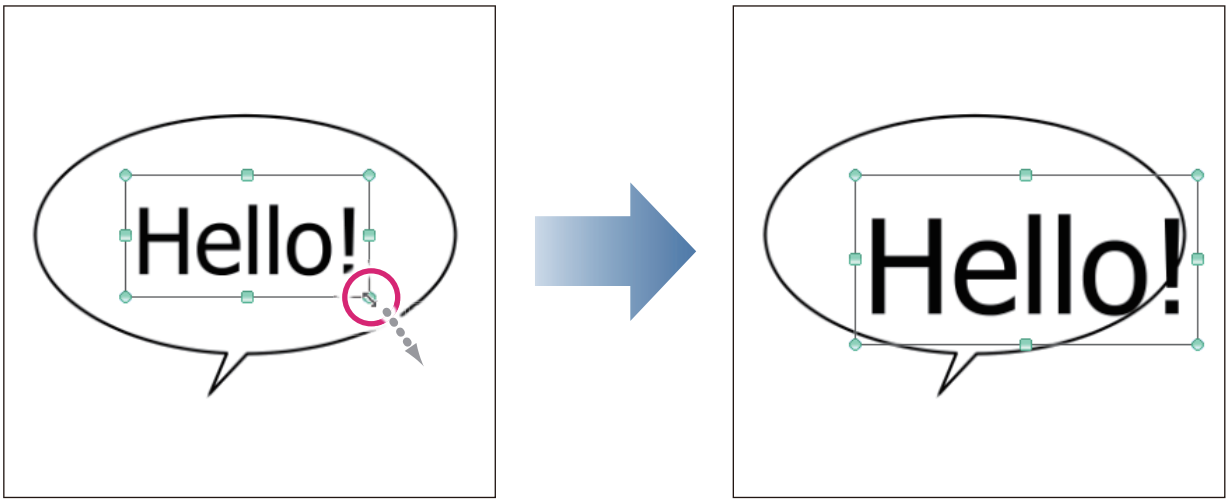
Open the [Sub tool] palette to select [Object].

3 Change the position and/or size of the text

Click above the letter to edit. Handles display around the balloon and text. Operating the handles allows you to move as well as scale up/down the text.

To change the text size

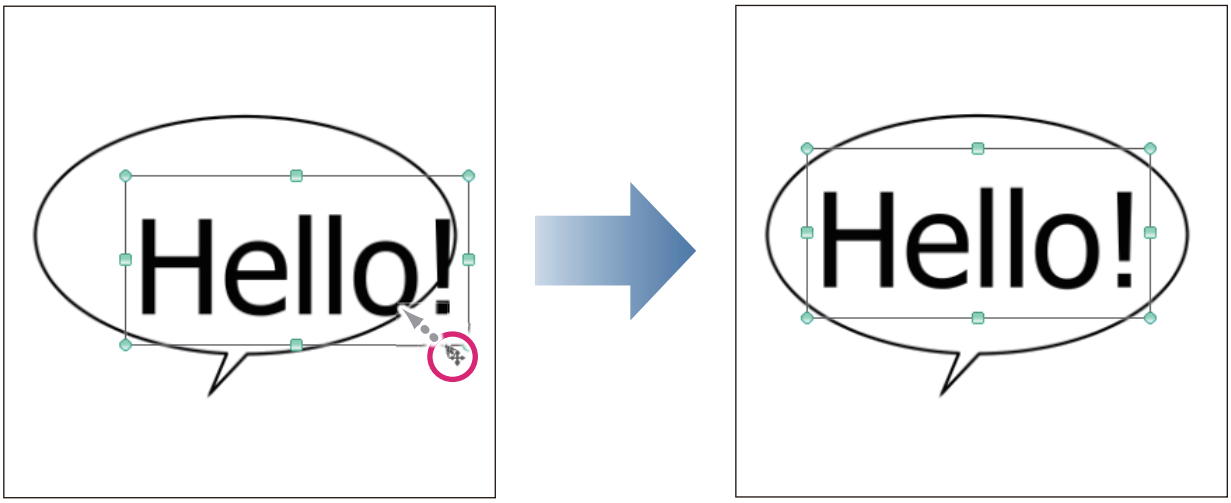
Dragging a text handle scales up/down the text.



Memo **Pressing the [Alt] key while transforming allows you to scale up/down around the center of the frame.**

To move the text

Dragging inside the text handles moves the text.



Adding the Reading

To add reading to the input text, proceed as follows:

1 Select the tool

On the [Tool] palette, select the [Text] tool.

2 Select the sub tool

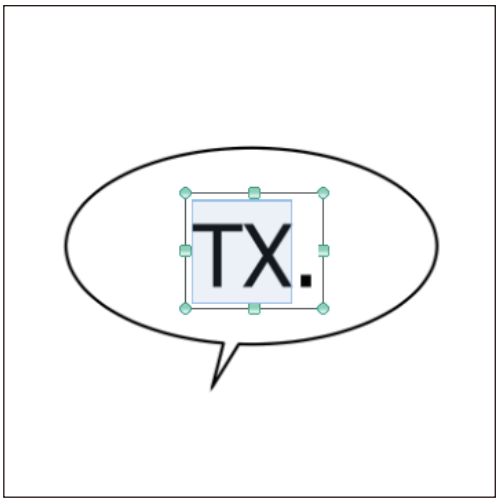
Open the [Sub tool] palette to select [Text].

3 Place text into editing mode

Click above the letter you want to edit. You can edit and/or re-input.

4 Select the letters

Select the letters to which you want to add the reading.



5 Display the Sub tool detail palette

Click [Sub tool detail] on the [Tool property] palette.

6 Add the reading

When the [Sub tool detail] palette displays, configure as follows:

(1) Click [Reading].

(2) Click [Reading setting].

(3) When the pop-up dialog box displays, input the text in [Reading string].

(4) Click the [Enter] key to commit the text.

Memo

To adjust the letter size, position and the like for the reading, configure on the [Sub tool detail] palette. For details, see "Text Tool Properties" → "Reading" .

7 The input of the reading is complete

The text input in [Reading string] is displayed along the selected letters.

Using the Mixing Font

Mixing font is a combination of font and size configured for each type of letter. This section describes how to configure a mixing font.

Creating the Mixing Font

To configure a mixing font, proceed as follows.

1 Select the tool

On the [Tool] palette, select the [Text] tool.

2 Select the sub tool

Open the [Sub tool] palette to select [Text].

3 Display the Sub tool detail palette

Click [Sub tool detail] on the [Tool property] palette.

4 Display the [Create mixing font] dialog box

From the [Sub tool detail] palette, display the [Create mixing font] dialog box.

(1) Click [Font].

(2) From [Font], select the font you want to use for the mixing font.

(3) Click [New].

5 Configure the mixing font

On the [Create mixing font] dialog box, create the mixing font.

(1) Input a name in [Combined font].

(2) Turn on the check box of the letter type to which you want to configure the font type and size.

(3) Configure the font type and size.

(4) Click [OK].

Memo

For [Create mixing font] dialog box, see "[Create mixing font] Dialog Box" .

6 The mixing font is created

The creation of the mixing font is complete when the mixing font name displays in [Font] of the [Sub tool detail] palette.

Using the Mixing Font

To use the created mixing font, proceed as follows.

1 Select the tool

On the [Tool] palette, select the [Text] tool.

2 Select the sub tool

Open the [Sub tool] palette to select [Text].

3 Display the Sub tool detail palette

From [Font] on the [Tool property] palette, select the created mixing font.

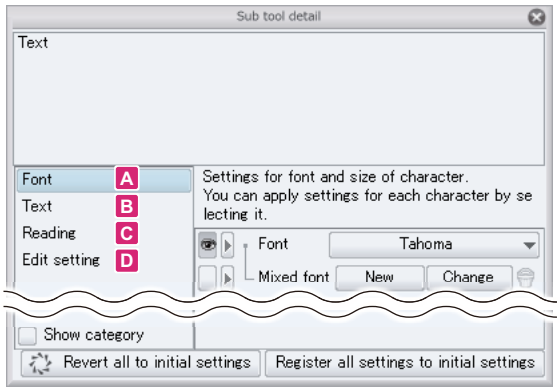
Inputting a text reflects the content of the configured mixing font.

Memo

Selecting with the [Object] sub tool also allows you to apply the mixing font afterwards from the [Tool property] to the input text.

Text Tool Properties

This section describes the items on the [Tool property] and [Sub tool detail] palettes when [Text] is selected on the [Sub tool] palette.



Memo

- **The [Sub tool detail] palette is a palette that displays when [Window] menu → [Sub tool detail] is selected. It allows for more detailed settings than the [Tool property] palette. [Tool property] palette settings and [Sub tool detail] palette settings with the same name are the same settings.**
- **When [Show category] on the [Sub tool detail] palette is turned on or [Show category] is turned on by opening the menu of the [Tool property] palette, categories are shown on the [Tool property] palette. Displaying categories is recommended if you want to check the settings on the [Tool property] palette.**
- **During text input, the [Sub tool detail] palette displays the text attributes of the [Text] layer being edited.**

A. Font

Allows you to configure input settings for the text such as the type and size of the letters.

(1) Font

Displays a font list. Select the font to use. For the font list, see "Font List" .

(2) Mixing font

Configures addition and deletion of mixing fonts. Mixing font is a combination of font and size configured for each type of letter.

(1) New	Creates a new mixing font. Clicking the item displays the [Create mixing font] dialog box. For [Create mixing font] dialog box, see "[Create mixing font] Dialog Box" .
(2) Change	Changes the settings for the mixing font selected in [Font]. Clicking the item displays the [Create mixing font] dialog box. The item is not displayed if there is a text being edited. Changes in the mixing font settings are not reflected in texts with mixing fonts input before the changes were made. For [Create mixing font] dialog box, see "[Create mixing font] Dialog Box" .
(3) Delete	Deletes the mixing font selected in [Font]. The item is not displayed if there is a text being edited.

(3) Size

Adjusts the letter size in points or Q.

(4) Word space

Configures the space between letters in points or Q.

Memo

- **To display [Word space], turn on [Render text like IllustStudio and Manga Studio 4] under [File] → [Text] on the [Preferences] dialog box. For details, see "Preferences [Windows]" → "[File]" → "Text" .**
- **The unit of [Size] and [Word space] can be toggled between points (pt) and Q. It can be configured from [Text unit] under [Ruler/Frame/Unit] → [Unit] on the [Preferences] dialog box. For details, see "Preferences [Windows]" → "[Ruler/Frame/Unit]" → "Unit" .**

(5) Style

Configure one of the following styles.

Bold	Makes the letters thick.
Italic	Leans the letters to the right.
Under/Side line	Adds an underline or a side line. Underline applies to text written horizontally while side line applies to text written vertically.
Strikethrough	Adds a horizontal line through the center of the letters. This item does not display for vertical text.

Memo

- **To display [Italic] or [Strikethrough], turn on [Render text like IllustStudio and Manga Studio 4] under [File] → [Text] on the [Preferences] dialog box. For details, see "Preferences [Windows]" → "[File]" → "Text" .**
- **To display [Side line], turn on [Render text like IllustStudio and Manga Studio 4] under [File] → [Text] on the [Preferences] dialog box. For details, see "Preferences [Windows]" → "[File]" → "Text" .**
- **Horizontal text and vertical text can be switched with [Text direction] in the [Edit setting] category. For details, see "Setting of editing" .**

(6) Open face

When turned on, converts letters into open face. The thickness of the openfaces may be selected from [Openface (Light)] and [Openface (Bold)].

Memo

To display [Openface], turn on [Render text like IllustStudio and Manga Studio 4] under [File] → [Text] on the [Preferences] dialog box. For details, see "Preferences [Windows]" → "[File]" → "Text" .

B. Text

Allows you to configure the text direction, alignment and spacing.

Important

Some settings may not display depending on the selected tool or sub tool.

(1) Justify

Configures the position for aligning the text lines.

Top align/Left align	Top align applies to vertical text while left align applies to horizontal text.
Center align	Centers each line.
Bottom align/Right align	Bottom align applies to vertical text while right align applies to horizontal text.

(2) Line space

Adjusts the space between lines.

Memo

To configure line space for each line, turn on [Render text like IllustStudio and Manga Studio 4] under [File] → [Text] on the [Preferences] dialog box. For details, see "Preferences [Windows]" → "[File]" → "Text" .

(3) How to specify

Configures the method for specifying the line spacing.

Specify length	Specify the space between lines as length (in points or Q).
By percentage	Specify the space between lines as a ratio (%) of the letter size.

Memo

- **To configure [How to specify], turn on [Render text like IllustStudio and Manga Studio 4] under [File] → [Text] on the [Preferences] dialog box. For details, see "Preferences [Windows]" → "[File]" → "Text" .**
- **The unit of [Specify length] for [Line space] can be toggled between points (pt) and Q. It can be configured from [Text unit] under [Ruler/Frame/Unit] → [Unit] on the [Preferences] dialog box. For details, see "Preferences [Windows]" → "[Ruler/Frame/Unit]" → "Unit" .**

(4) Text color

Allows you to specify the color for the additional text.

Main color	Configures the main drawing color as text color.
Sub color	Configures the sub drawing color as text color.
User color	Configures the color specified by the user as text color. Selecting a color with a color palette, eye dropper and the like, and clicking the icon allows you to configure the color. The configured color is not affected by changes in the main drawing color and sub drawing color, even when changed before the line is drawn.
Select user color	Displays the dialog box for selecting a text color. This item does not display as icon.

C. Reading

Allows you to configure settings related to annotative glosses indicating the pronunciation (reading).

Memo

- **To configure [Reading], turn on [Render text like IllustStudio and Manga Studio 4] under [File] → [Text] on the [Preferences] dialog box. For details, see "Preferences [Windows]" → "[File]" → "Text" .**
- **The unit of [Adjust reading], [Space between reading and main text] and [Word space] can be toggled between points (pt) and Q. It can be configured from [Text unit] under [Ruler/Frame/Unit] → [Unit] on the [Preferences] dialog box. For details, see "Preferences [Windows]" → "[Ruler/Frame/Unit]" → "Unit" .**

(1) Reading setting

Allows you to configure reading for a specified text. It also allows you to delete a configured reading.

Selecting and clicking a text to configure/delete the reading displays a pop up dialog box for configuring the reading. Clicking outside the pop up commits the setting.

[Reading setting] Pop up Dialog Box

(1) Target string	Displays the selected text.
(2) Reading string	Input how to read the text.
(3) Delete	Deletes the reading.

Memo

[Reading setting] is not available if a text is not selected.

(2) Reading font

Displays a font list. Select the font to use for indicating the reading. For the font list, see "Font List" .

(3) Reading size (%)

Configure the size of the letters to be used for indicating the reading. Specify the size as a ratio (%) of the letter size.

(4) Reading position

Select the reading display position from [Top align], [Center align] and [Bottom align].

(5) Adjust reading

Adjusts the reading display position by points or Q. Configure the displacement from the alignment position selected in [Reading position].

(6) Space between reading and main text

Adjusts the distance between the reading and the text by points or Q.

(7) Reading spacing

Auto-arranges the space between the reading letters by distributing them evenly. Select one from [Even 1], [Even 2], [Even 3] and [Free]. Selecting [Free] allows you to specify the [Word space] in points or Q.

(8) Word space

Specifies the space between reading letters in points or Q.

D. Setting of editing

Configure settings related to the direction of letters in the text and method for adding layers.

(1) Text direction

Select text direction from [Vertical] and [Horizontal].

(2) Anti-alias

Configure anti-aliasing for text.

Canvas setting	Configuring [Monochrome] for [Basic expression color] on the [New] dialog box automatically disables the anti-aliasing. This item does not display when the [Object] sub tool is selected.
On	Enables anti-aliasing.
Off	Disables anti-aliasing.

Memo

The [New] dialog box displays when [File] menu → [New] is selected. For details, see "Menu" → "File Menu" → "New" .

(3) TateChuYoko (Horizontal in Vertical)

Displays half-width letters horizontally when text is input vertically. Select the number of letters to display horizontally from [None], [1 letters], [2 letters], [3 letters] and [4 letters].

For example, if [2 letters] is configured, 2 half-width letters are displayed horizontally but 3 or more half-width letters are displayed vertically.

When [2 letters] is configured for Horizontal in Vertical

(4) Display quality while editing

Allows you to configure the display quality of the text while it is being edited.

Fast	The text may be displayed coarse during editing but the load on your computer may be eased.
High quality	The text being edited displays in high quality but your computer may become slow depending on the environment.

(5) Show resize handle

Displays/hides resize handles for scaling up/down the text.

(6) How to add

Configures the method for adding text layers during text input. This item is available only when a [Text] layer or [Balloon] layer is selected.

Create layer always	When text is input, creates a new text layer.
Add to selected text	If text is input when a text layer is selected, adds text to the selected text layer.
Auto detect where to insert	Creates a new text layer depending on the text input position. When text is input inside a balloon or near the selected text, adds text to the existing text layer or balloon layer.

Font List

This is a screen displayed when selecting a font. It allows you to configure settings such as the switching of the [Font list] to display, method of displaying the fonts, and so on.

(1) Font list

Displays a list of available fonts.

Memo **To display more fonts in the [Font list], resize it by dragging one of the edges.**

(2) Display font name

Displays only the font name on the [Font list].

(3) Display font name in specific font

Displays each font name on the [Font list] using the corresponding font.

(4) Display text in specific font

Previews the selected text on the [Font list]. Sample alphanumeric characters and hiragana are displayed if a text is not selected.

(5) Switch font list

Switches the [Font list] to display. You can create and edit the [Font list] with the [Settings of font list] dialog box that displays when you click [Settings of the font list]. For details on the [Settings of the font list] dialog box, see "[Settings of font list] Dialog Box" .

(6) Settings of font list

Displays the [Settings of font list] dialog box, which allows you to configure a [Font list]. For details on the [Settings of the font list] dialog box, see "[Settings of font list] Dialog Box" .

[Settings of font list] Dialog Box

A dialog box that displays when [Settings of font list] is clicked. Allows you to perform [Font list] management tasks, such as create, edit and delete.

(1) Font list

Displays a list of [Font lists].

(2) New

Creates a new [Font list]. When clicked, adds a [Font list] to the list of [Font lists] and at the same time, enables the selection of fonts from [Available fonts].

(3) Change name

Changes the name of the [Font list] selected on the list of [Font lists].

Memo

You can also change the name of a [Font list] by double clicking its name on the list of [Font lists].

(4) Duplicate

Makes a copy of the [Font list] selected on the list of [Font lists].

(5) Delete

Deletes the [Font list] selected on the list of [Font lists].

(6) Available fonts

Allows you to select a font to display on the [Font list]. Selecting the font to display from [Available fonts] and turning on its check box adds the font to the [Font list].

Memo

- **If [Available fonts] is displayed empty, select the [Font list] from the list of [Font lists].**
- **To display more fonts in [Available fonts], resize it by dragging one of the ends.**

(7) Display font name

Displays only the font names on [Available fonts].

(8) Display font name in specific font

Displays each font name on [Available fonts] using the corresponding font.

(9) Select all

Selects all fonts displayed on [Available fonts].

(10) Deselect all

Deselects the selection of all of the fonts displayed on [Available fonts].

[Create mixing font] Dialog Box

Use this dialog box to configure a mixing font.

(1) Mixing font name

Input a name for the mixing font.

(2) Default

Configures the default font. The default font applies when the font and letter size settings are disabled.

By default, the font configured in [Font] on the [Tool property] palette or [Sub tool detail] palette displays.

(3) Font

Configures the font type and size for each letter type.

(1) Enable/Disable	Enables/disables the font and size settings.
(2) Letter type	Type of letter to which mixing font can be configured. The following options are available: [Hiragana/Katakana], [Kanji], [Signs], [Single-byte numbers], [Singly-byte alphabet], [Punctuation mark] and [External letter].
(3) Font	Displays a font list. Configure the font to use. For the font list, see "Font List" .
(4) Letter size	Specifies the letter size in %. The letter size changes based on the value configured for [Size] on the [Tool property] palette and [Sub tool detail] palette.

Explanation: 3D Materials

This chapter describes how to edit 3D materials.

Types of 3D Data

The types of 3D data supported by Manga Studio 5.0 are as follows.

3D Character Materials

3D character materials are character materials whose pose, facial expression and the like can be changed.

They are registered under [Material[3D character]] on the [Material] palette.

3D Item Materials

3D item materials are item materials whose angle and size can be changed.

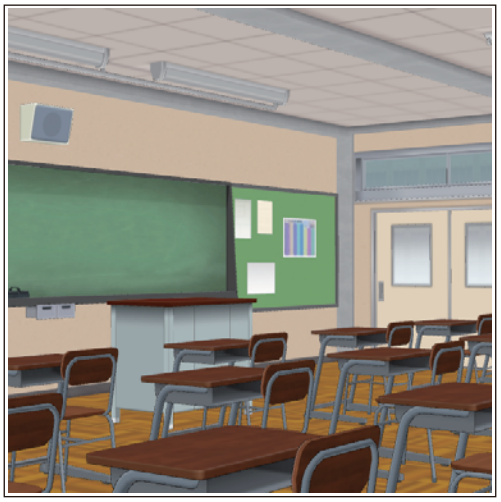
They are registered under [Material[3D item]] on the [Material] palette.

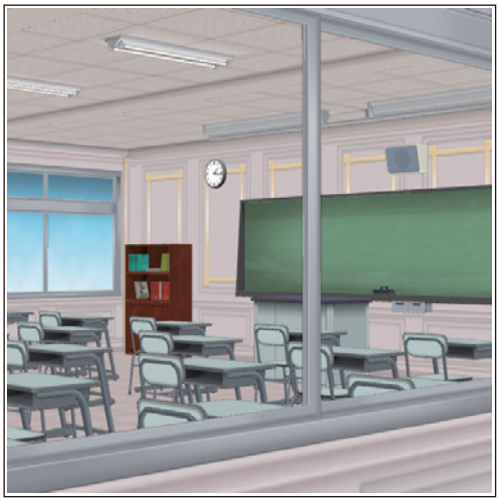
3D item materials can be used combined with other 3D item materials, as well as 3D character materials.

3D Background Materials

3D background materials are background materials whose angle and material (material properties and color tone) can be changed.

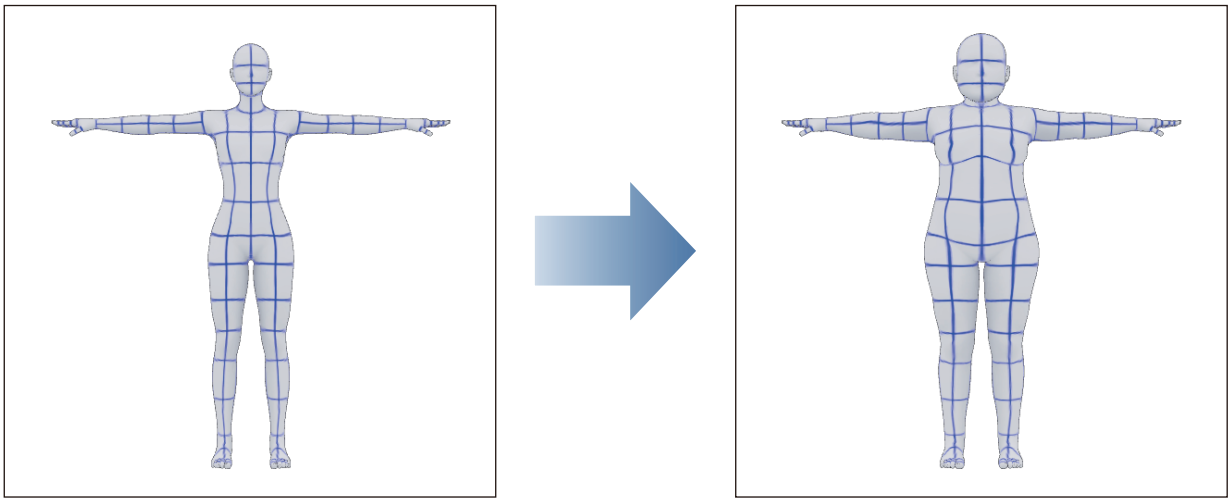
They are registered under [Material[3D background]] on the [Material] palette.





3D Drawing Dolls

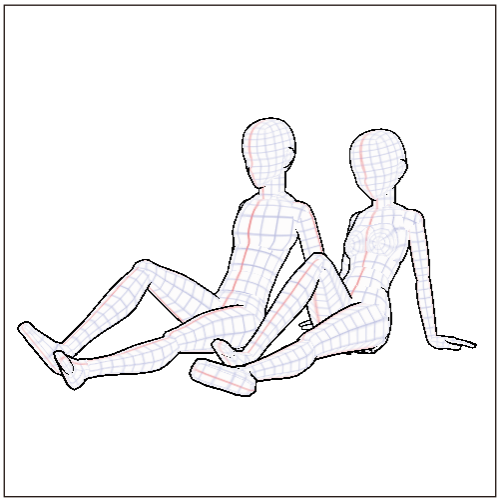
3D drawing dolls can have their body shape and pose changed. Body shapes configured using 3D drawing dolls can be saved as materials. Unlike 3D character materials, 3D pose model materials cannot have their hair style, facial expression and the like changed.



3D Pose Model Materials

3D pose model materials are materials whose pose can be changed. Unlike 3D character materials, 3D pose model materials cannot have their hair style, facial expression and the like changed.

3D pose model materials are not registered in the [Material] palette. They are distributed via "Search material" of the Creative Activity Support Site "CLIP(Japanese only)" and the like.



For how to import 3D pose model materials, see "Importing 3D Materials" .

As for settings, 3D pose model materials can be configured in the same way as 3D character materials, with the exception of some settings which are unavailable.

Memo

3D materials in HexaGreat format (extension: 6kt or 6kh) configured with bones, can be operated in the same way as pose model materials.

Operating 3D Materials

This section describes how to operate 3D materials.

Pasting a 3D Material

The following describes the procedure to paste a 3D material to the canvas.

1 Paste the 3D character material

Paste the 3D character material to the canvas.

(1) On the tree view, select [3D] → [Character].

(2) Select the character and drag and drop it to the canvas.

Memo

Materials can also be pasted to the canvas by clicking [Paste material] on the [Material] palette.

(3) The 3D character material is pasted to the canvas, and a 3D layer created in the [Layer] palette.

Memo

Creating a 3D layer also creates a three-point perspective ruler at the same time. The perspective ruler is hidden immediately after the creation of the 3D layer. For details on how to operate a perspective ruler, see "Explanation: Perspective ruler" .

2 Paste the 3D item material

Paste the 3D item material to the canvas.

(1) On the tree view, select [3D] → [Small object].

(2) Select the 3D item material and drag and drop it to the canvas.

(3) The 3D item material is pasted to the canvas. A 3D layer is not created in the [Layer] palette as the 3D item material is added to the already created 3D layer.

Important

- **You can manage multiple 3D materials in one 3D layer. To create a 3D layer for each 3D material, paste the 3D material after selecting other than a 3D layer on the [Layer] palette.**
- **3D materials pasted after pasting a 3D background material may be hidden. Operate the [Movement manipulator] of the pasted material and move until it becomes visible. For details on how to operate the [Movement manipulator], see "Operations Using the Movement Manipulator" .**

3 Select the tool

On the [Tool] palette, select the [Operation] tool.

4 Adjust the 3D material

Open the [Sub tool] palette to select [Object] and adjust the position and pose of the 3D material.

Memo

- **For how to adjust the position of the 3D materials, see "Deciding the Position of a 3D Item Material" and "Deciding the Position and Pose of a 3D Character/3D Drawing Doll" .**
- **3D backgrounds and 3D drawing dolls can be pasted to the canvas in a similar way.**

Importing 3D Materials

In addition to 3D materials registered in the [Material] palette, you can import 3D materials in the following formats.

File formats that can be imported	c2fc, c2fr, fbx, lwo, lws, obj, 6kt, 6kh

Important

Files in ccr format, ccrx format and m3c format distributed at the Creative Activity Support Site "CLIP(Japanese only)" cannot be imported.

Memo

- **3D materials downloaded from the Creative Activity Support Site "CLIP(Japanese only)" can be imported to Manga Studio 5.0 directly in zip format.**
- **Some materials may not be imported directly from zip format. In this case, unzip the file and import to Manga Studio 5.0 the 3D material in any of the aforementioned formats.**

1 Select the 3D material

Select the 3D material to import from your computer.

2 Import the 3D material

Drag and drop the 3D material to the Manga Studio 5.0 canvas.

The 3D material is imported to the canvas.

Memo

3D materials can be imported only to the canvas. They cannot be imported to a [Material] palette.

Deleting a 3D Material

To delete a 3D material from a canvas, proceed as follows.

1 Select the tool

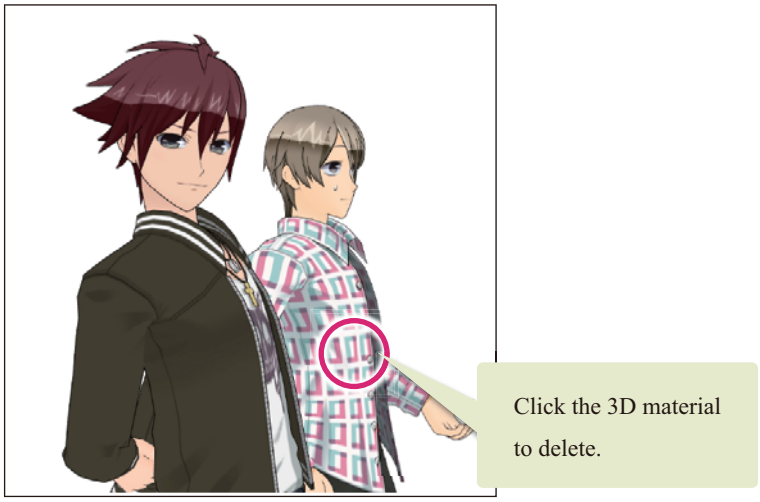
On the [Tool] palette, select the [Operation] tool.

2 Select the sub tool

Open the [Sub tool] palette to select [Object].

3 Select the 3D material

Click to select the 3D material to delete.



4 Delete the 3D material

Select [Edit] menu → [Clear].

Memo

You can also delete by pressing the [Delete] key.

Selecting a 3D Material

To select the 3D material to edit, proceed as follows.

1 Select the tool

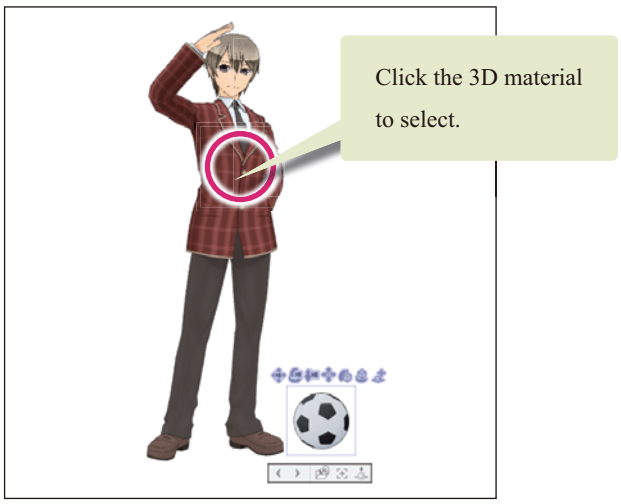
On the [Tool] palette, select the [Operation] tool.

2 Select the sub tool

Open the [Sub tool] palette to select [Object].

3 Select the 3D material

Click the 3D material to select.



A [Movement manipulator] and an [Object launcher] display for the clicked 3D material, and the 3D material becomes selected.

Memo

- For details on how to operate the [Movement manipulator], see "Operations Using the Movement Manipulator" .
- For how to operate the [Object launcher], see "Operations Using the Object Launcher" .

Deciding the Position of a 3D Item Material

The display size and position of a 3D item material can be configured in accordance with the work.

Memo

- For how to operate 3D character materials, see "Deciding the Position and Pose of a 3D Character/3D Drawing Doll" .
- For how to operate 3D background materials, see "Deciding the Position of a 3D Background Material" .
- The position of 3D item materials can be configured in detail by using the [Tool property] palette and [Sub tool detail] palette.

Moving a 3D Item Material

To move the position of a 3D item material horizontally or vertically, proceed as follows.

1 Select the 3D item material

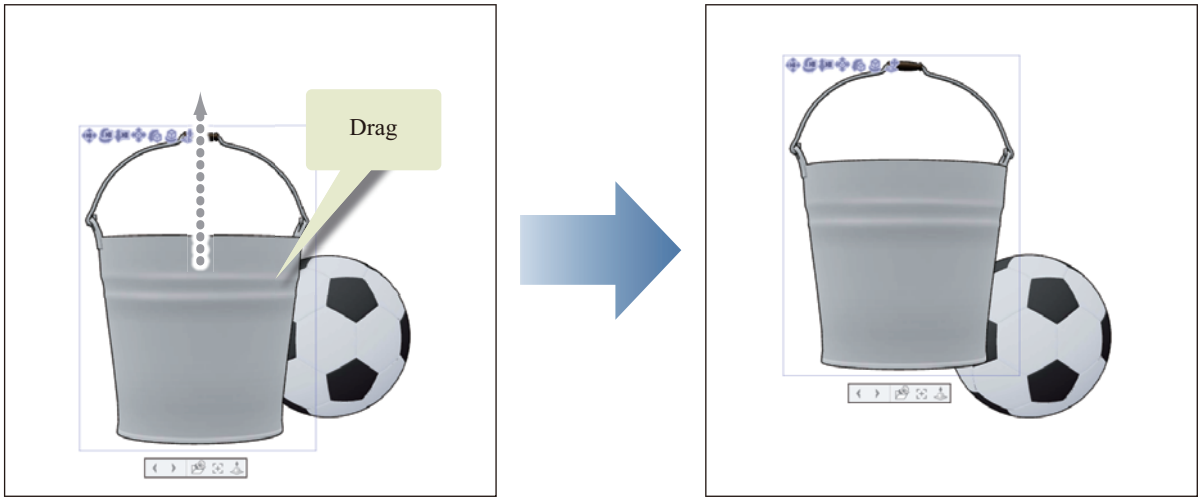
Select the 3D item material to move.

Memo

For how to select a 3D item material, see "Selecting a 3D Material" .

2 Move the 3D item material

Dragging the selected 3D item material moves it in the dragged direction.



Memo

To move a 3D item material back and forth, configure on the [Sub tool detail] palette. For details, see "Sub tool detail Palette Settings (When a 3D Item Material Is Selected)" .

Rotating a 3D Item Material

To rotate and change the angle of a 3D item material, proceed as follows.

1 Select the 3D item material

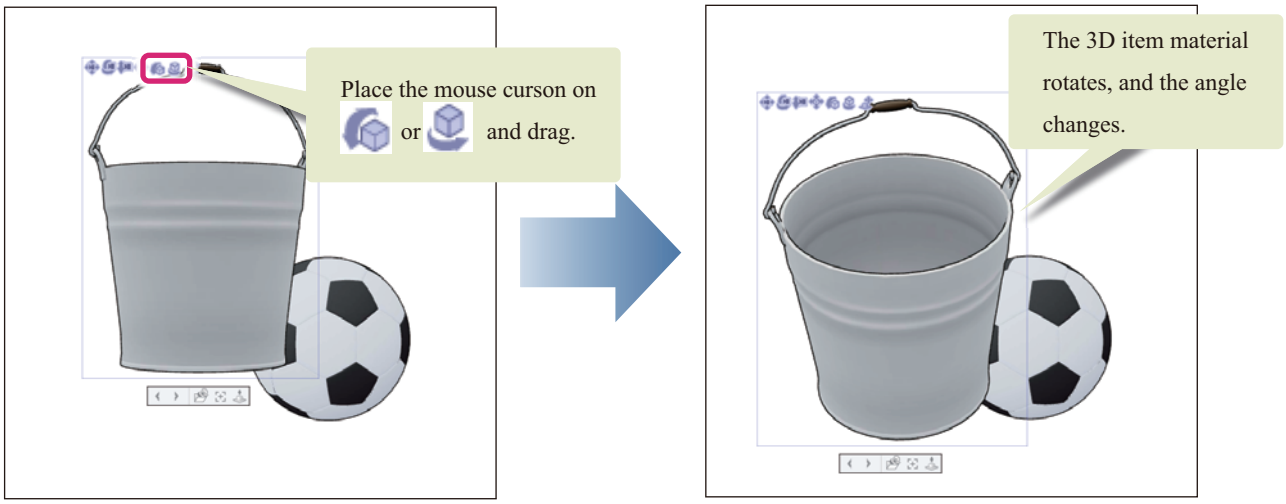
Select the 3D item material to rotate.

Memo

For how to select a 3D item material, see "Selecting a 3D Material" .

2 Change the angle of the 3D item material

Drag [Rotate 3D material vertically] or [Rotate 3D material horizontally] on the movement manipulator to change the angle of the 3D item material.



Memo

- **You can adjust the angle of a 3D item material with the [Sub tool detail] palette. The palette is suitable for fine adjustment as it allows numerical input. For details, see "Sub tool detail Palette Settings (When a 3D Item Material Is Selected)" .**
- **The orientation of the 3D item material can be adjusted from the list that is displayed by clicking the [Rotate] on the [Object launcher].**
  For details on the operating procedure, see "When a 3D Item Material Is Selected" .

Deciding the Position and Pose of a 3D Character/3D Drawing Doll

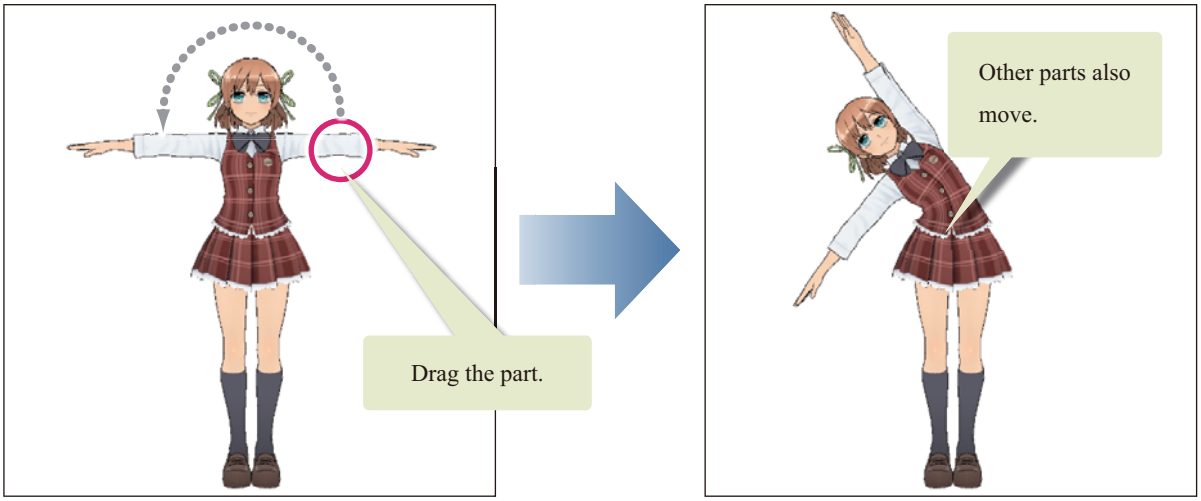
The pose and facial expression of 3D character materials and 3D drawing dolls can be configured in accordance with the work. This section describes how to configure a 3D character material/3D drawing doll with mouse operation. The pose of 3D pose model material can also be configured in a similar way.

Regarding 3D Character Materials

3D character materials are composed of body [parts] such as arms, fingers and head.

Each part has "standard bones" configured, which move in the same way as human joints.

Since the [Bones] of each part are linked, moving a part moves other parts as well.



In Manga Studio 5.0, poses for a model are defined by moving/rotating the parts.

Memo

For 3D character materials configured with physical settings in CLIP STUDIO COORDINATE, physical settings are reflected when the 3D character materials are moved. For details on CLIP STUDIO COORDINATE, see the Creative Activity Support Site "CLIP(Japanese only)" (http://www.clip-studio.com/clip_site/).

Selecting a Pose

Manga Studio 5.0 comes with preconfigured poses for 3D character materials and 3D drawing dolls, which you can just select to assign a pose to the 3D character material or 3D drawing doll.

Memo

You can also assign a pose to a 3D character material or 3D drawing doll by dragging and dropping a pose file (extension: PEP) created in POSE STUDIO.

1 Select the tool

On the [Tool] palette, select the [Operation] tool.

2 Select the sub tool

Open the [Sub tool] palette to select [Object].

3 Select the 3D material

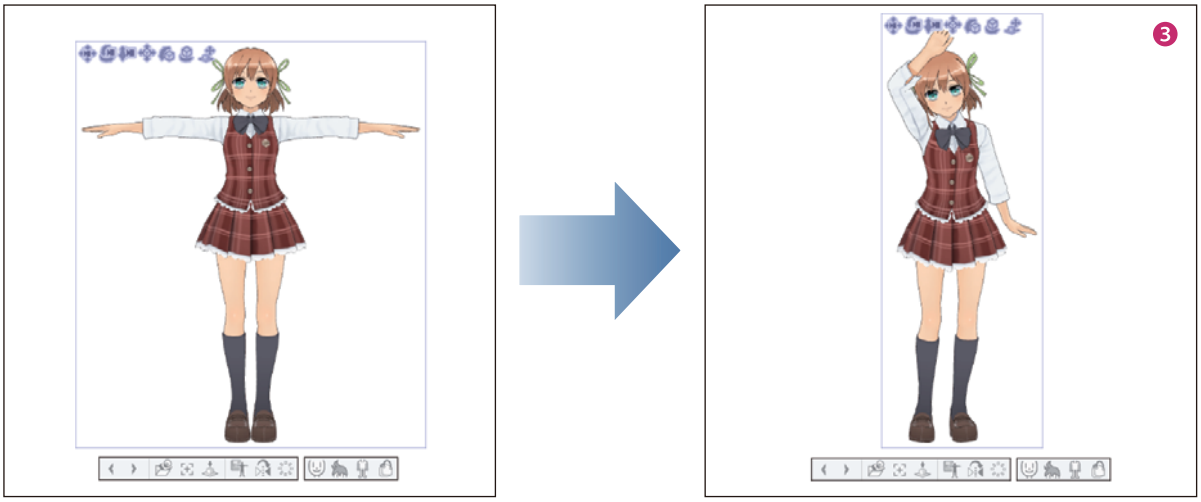
Click the 3D character material or 3D drawing doll to edit.

4 Select the pose

Select a pose from the [Material] palette.

(1) On the [Tree view], select [3D] → [Pose] → [Whole body].

(2) Select a pose and drag and drop it to the canvas.



(3) The selected pose is reflected in the 3D character material or 3D drawing doll.

Memo **If you drag and drop a pose to the canvas when there are no 3D materials on the canvas, a 3D drawing doll with the selected pose displays.**

Fixing and Releasing Joints

Joints of 3D characters and 3D drawing dolls can be fixed. The fixed joint becomes the fulcrum for translation and rotation. Creating a pose is easier if the joints of 3D character materials and 3D drawing dolls are fixed. This section describes how to fix and release joints, and the extension of parts fixed when a joint is fixed.

Memo

- **Some parts are configured with multiple bones such as "Hips" and "Chest". If fixing a joint connecting part does not function as intended, fix another joint. To look for another joint, move the mouse cursor near the part to be fixed. Part edges displayed in red are joints you can fix.**
- **There is no limit in the number of joints that can be fixed.**
- **When no joints have been fixed, the "Hips" part is fixed.**

Fixing a Joint

To fix a joint, proceed as follows.

1 Select the tool

On the [Tool] palette, select the [Operation] tool.

2 Select the sub tool

Open the [Sub tool] palette to select [Object].

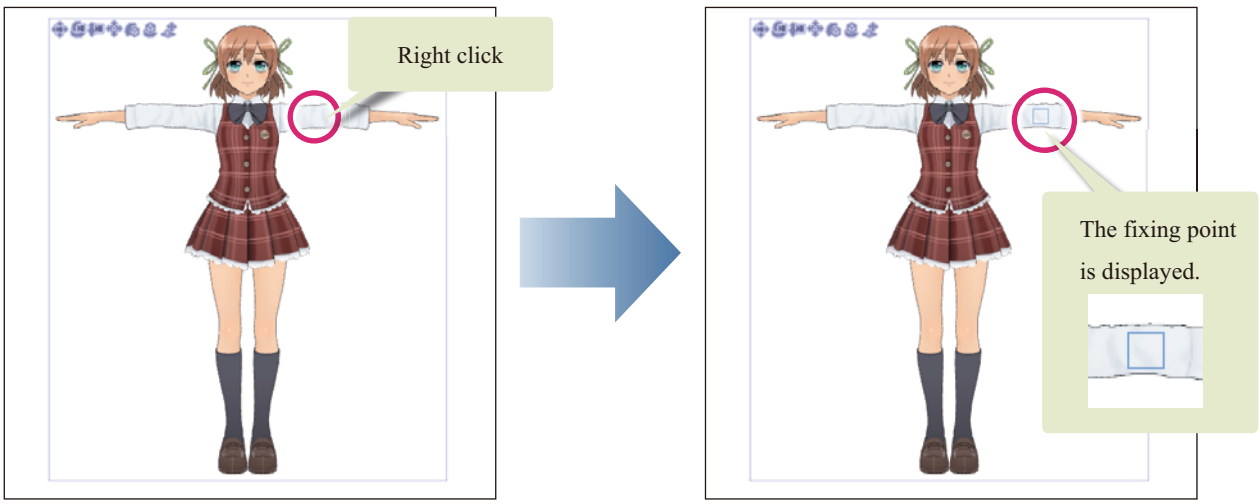
3 Select the 3D material

Click the 3D character material or 3D drawing doll to edit.

4 Fix the joint

Right click over the part to fix.

A fixing point is displayed at the tip of the clicked part. Joints that can be fixed are those with a fixing point.



Releasing a Fixed Joint

To release a fixed joint, proceed as follows.

1 Select the tool

On the [Tool] palette, select the [Operation] tool.

2 Select the sub tool

Open the [Sub tool] palette to select [Object].

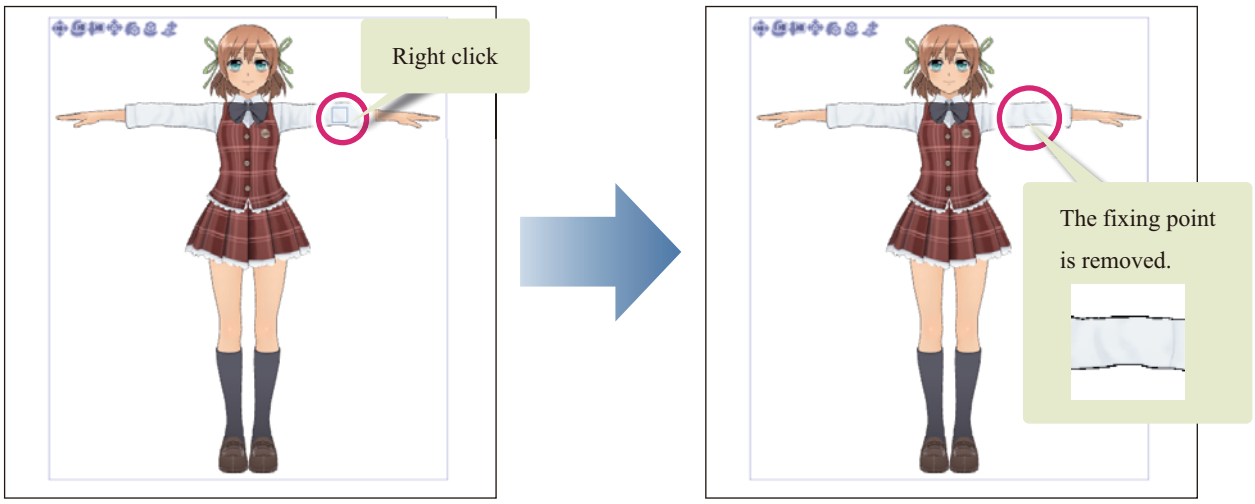
3 Select the 3D character material

Click the 3D character material to edit.

4 Release the fixed joint

Right click the part whose fixed joint is to be released.

The fixed joint of the clicked part is released and the fixing point, removed.



Memo

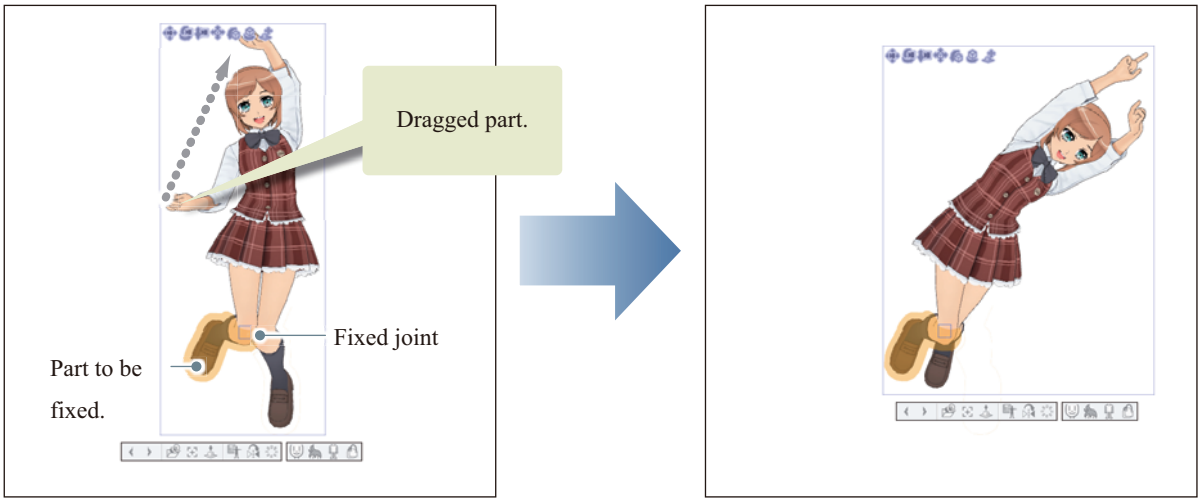
Right clicking other than the 3D character material on the canvas releases all fixed points, removing all fixing points.

Effective Range

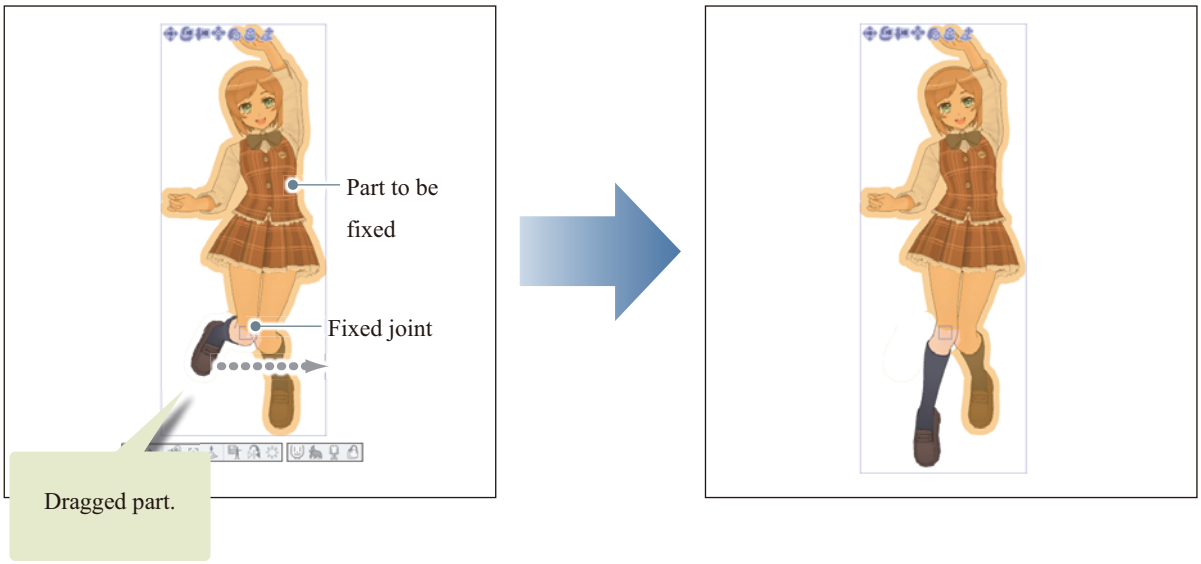
The extension of parts fixed as a result of fixing a joint depends on the fixed joint and location of the selection.

Parts on the opposite side of the selection, with center in the fixed joint are fixed.

For example, selecting "left arm" when the "right knee" is fixed, fixes from the right shin down.



Furthermore, selecting "right shin" when the "right knee" is fixed, fixes the left leg, right thigh and the upper body.



Moving a Part

To move a part of a 3D character or 3D drawing doll, proceed as follows.

1 Select the tool

On the [Tool] palette, select the [Operation] tool.

2 Select the sub tool

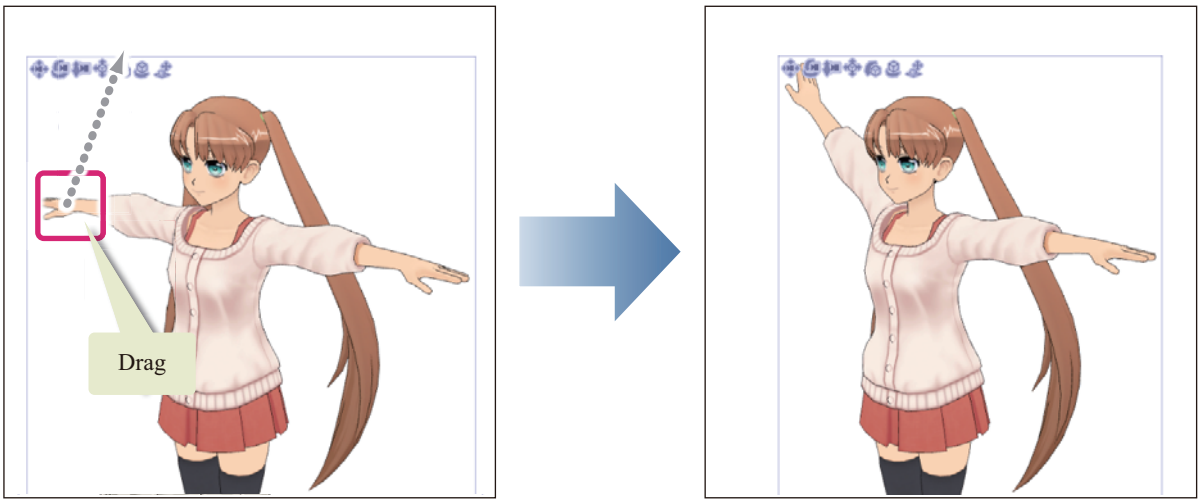
Open the [Sub tool] palette to select [Object].

3 Select the 3D material

Click the 3D character material or 3D drawing doll to edit.

4 Move the part

Drag the part to move.



Rotating a Part

To rotate a selected part, proceed as follows.

1 Select the tool

On the [Tool] palette, select the [Operation] tool.

2 Select the sub tool

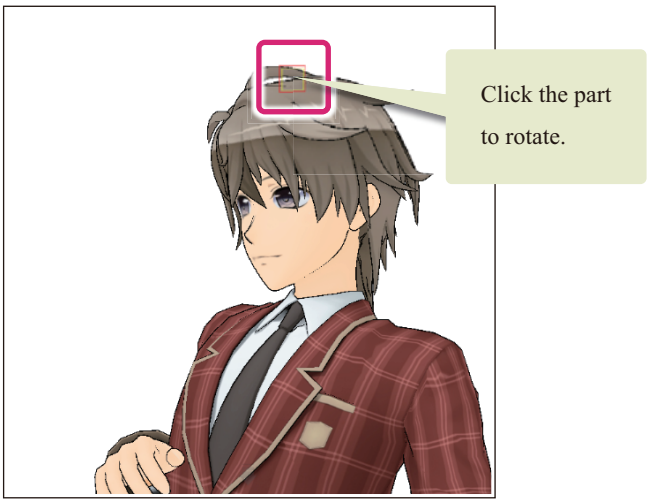
Open the [Sub tool] palette to select [Object].

3 Select the 3D material

Click the 3D character material or 3D drawing doll to edit.

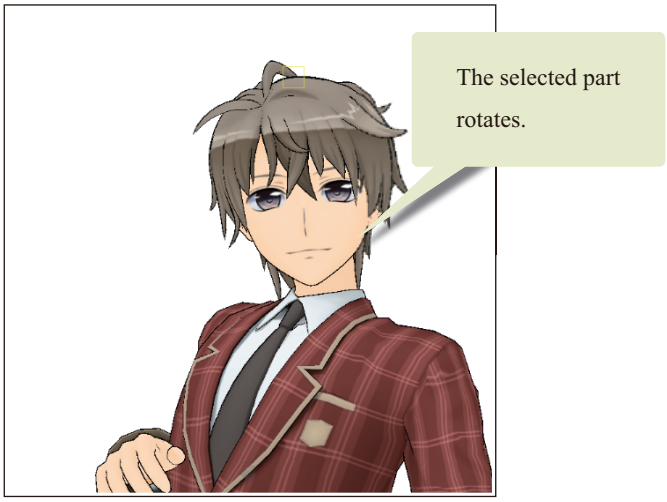
4 Select the part

Click to select the part to rotate.



5 Rotate the part

Operate the mouse wheel. The selected part rotates.



Deciding the Hand Pose

Creating a pose for a hand is easy if the [Pose] category on the [Sub tool detail] palette or the [Tool property] palette is used.

Operating Procedure

To decide a pose for a hand, proceed as follows.

1 Select the tool

On the [Tool] palette, select the [Operation] tool.

2 Select the sub tool

Open the [Sub tool] palette to select [Object].

3 Select the 3D material

Click the 3D character material or 3D drawing doll to edit.

4 Select the hand for which to create a pose

Click the direction of the hand for which to create a pose.

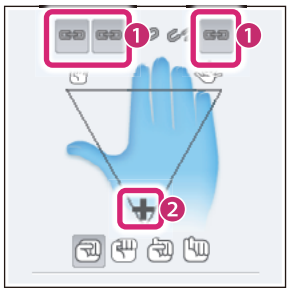
Memo

When configuring a hand pose to a 3D character material or 3D drawing doll, the hand on which the pose will reflect may vary depending on the selection.

- **When a part on the right side of the body is selected, the pose will be reflected in the right hand.**
- **When a part on the left side of the body is selected, the pose will be reflected in the left hand.**
- **When a part in the center of the body is selected or certain parts are not selected, the pose will be reflected in both hands.**

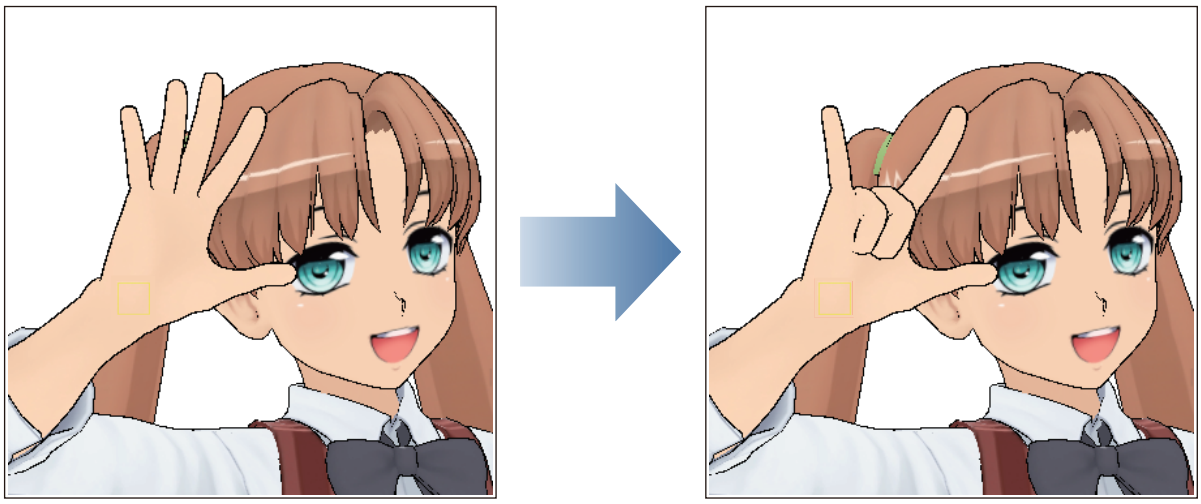
5 Configure the hand pose

Configure the hand pose with [Hand setup] on the [Tool property] palette.



(1) On [Lock finger], click the icon of the finger to fix (lock).

(2) Drag [+] on the [Hand controller] and configure how to bend the fingers.



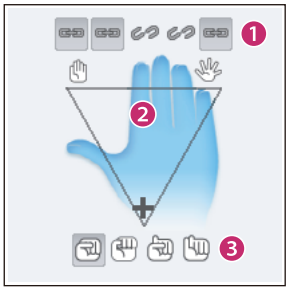
(3) A hand pose is created for the 3D character material.

Memo

- For the functions of each part of [Hand setup], see "Hand Setup Items" on the next section.
- Selecting [3D] → [Pose] → [Hand] from the [Material] palette displays a list of preconfigured hand poses. Selecting the icon of the desired pose to assign to the 3D character material or 3D drawing doll, and dragging and dropping it to the 3D character material or 3D drawing doll assigns the pose to the hand.

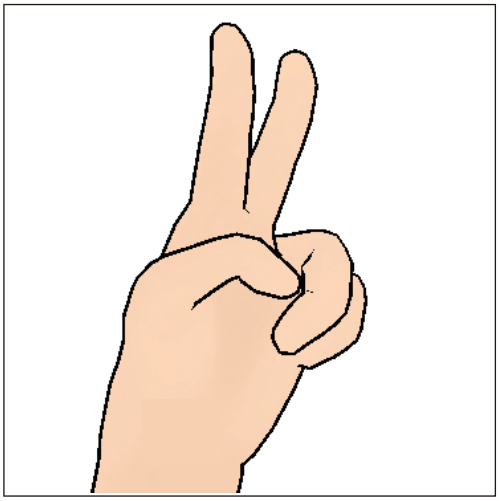
Hand Setup Items

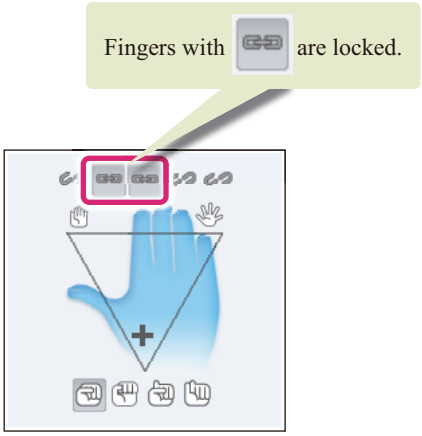
The following describes the items available on the [Pose] category of the [Sub tool detail] palette and the [Hand setup] of the [Tool property] palette.



(1) Lock finger

Locks fingers. From left to right, configures the settings for [Thumb], [Index finger], {Middle finger], [Ring finger] and [Little finger]. Clicking a finger displays a chain icon and locks the finger. A locked finger cannot be moved with the [Hand controller].



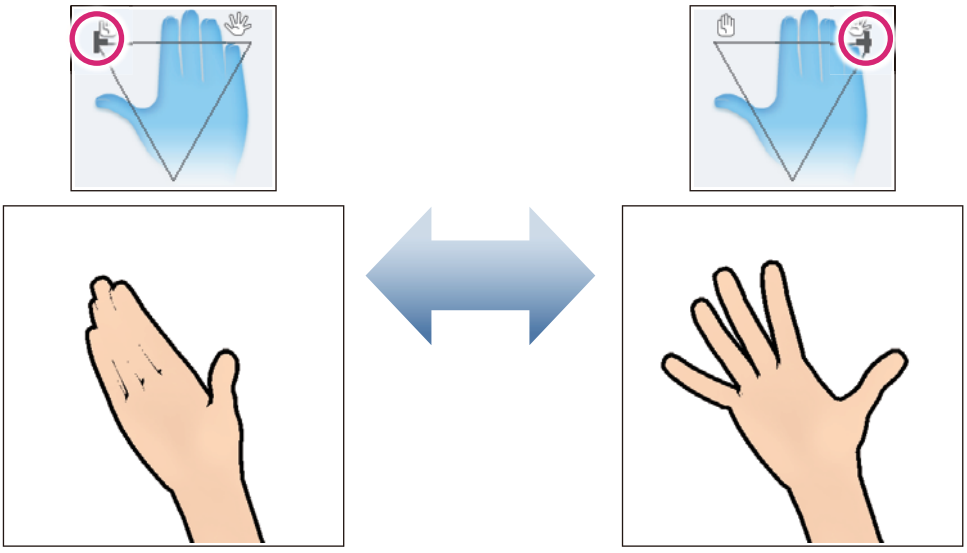


(2) Hand controller

Dragging [+] allows you to create a pose for the hand.

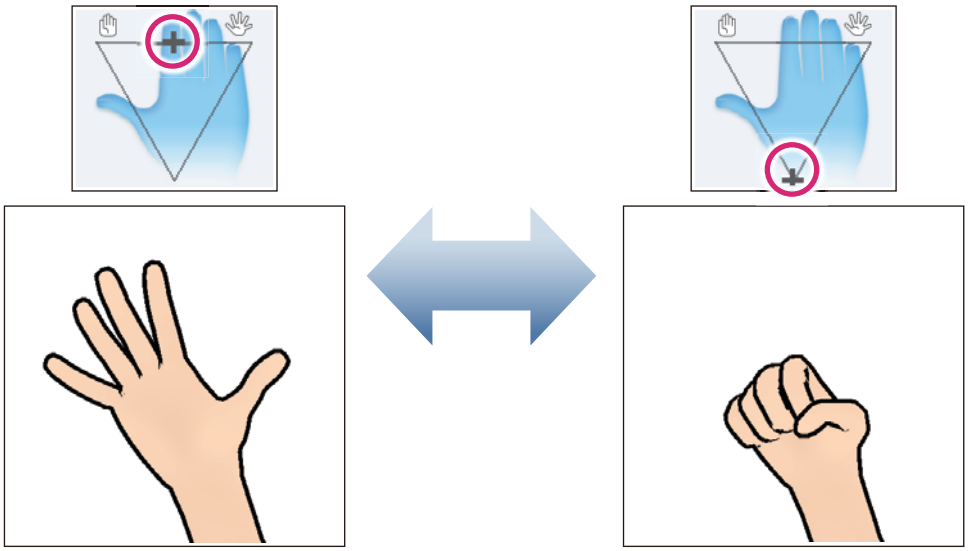
Fingers extended and together/Fingers extended and spread apart

Moving [+] to the left, makes the fingers move closer. Moving [+] to the right, makes the fingers spread apart.



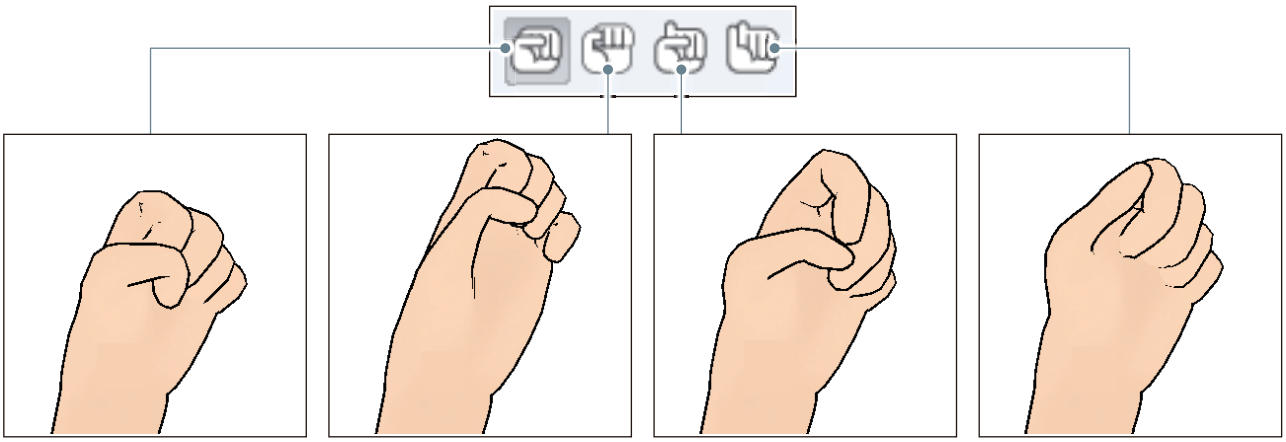
Open hand/Close hand

Moving [+] upwards opens the hand. Moving [+] downwards closes the hand.



(3) Fist presets

Click the corresponding icon to configure how the fist should look like. There are four fist presets available.



Moving a 3D Character Material or 3D Drawing Doll

To move a 3D character material or 3D drawing doll horizontally or vertically, proceed as follows.

1 Select the tool

On the [Tool] palette, select the [Operation] tool.

2 Select the sub tool

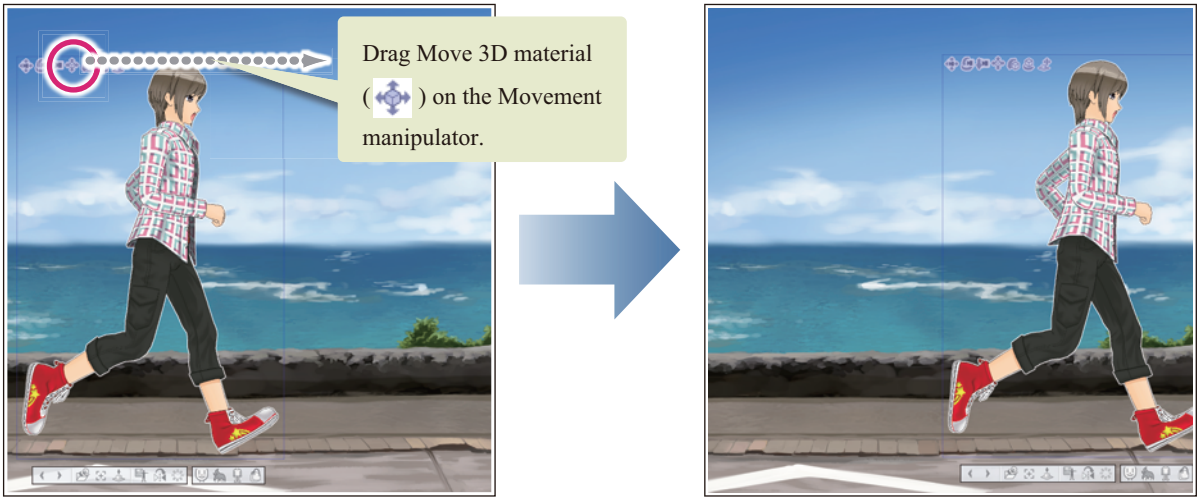
Open the [Sub tool] palette to select [Object].

3 Select the 3D material

Click the 3D character material or 3D drawing doll to move.

4 Move the 3D character material

Dragging [Move 3D material] on the [Movement manipulator] moves the 3D character material in the dragged direction.



Registering the Pose of a 3D Character or 3D Drawing Doll

The pose created for a 3D character material or 3D drawing doll can be registered in a [Material] palette. A registered pose can be applied to another 3D material or canvas.

1 Select the tool

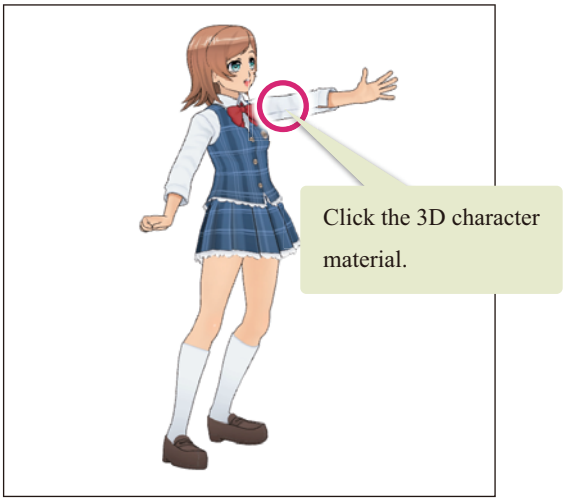
On the [Tool] palette, select the [Operation] tool.

2 Select the sub tool

Open the [Sub tool] palette to select [Object].

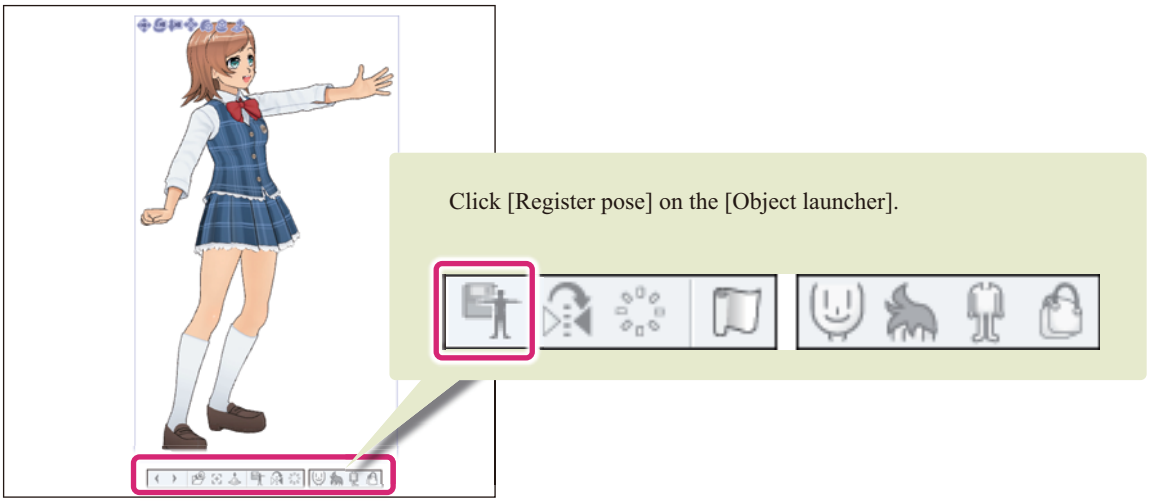
3 Select the 3D material

Click the 3D character material or 3D drawing doll whose pose is to be registered.



4 Register the pose

Click [Register pose] on the [Object launcher].



5 Configure the material

The [Material property] dialog box displays. Configure the settings for the material on the dialog box.

(1) Configure settings such as name, save destination, tag for search and the like for the material.

(2) Click [OK].

Memo **For details on the [Material property] dialog box, see "[Material property] Dialog Box" .**

6 The registration of the pose is complete

The dialog box closes and the pose is registered in the [Material] palette as configured.

Memo **For how to import a registered pose, see "Selecting a Pose" .**

Creating a Pose with QUMARION

Manga Studio 5.0 supports QUMARION. Creating the pose with QUMARION allows you to operate the 3D character material more intuitively.

For details on how to use QUMARION in Manga Studio 5.0, see "Operations Using QUMARION" .

Configuring a 3D Drawing Doll Body Shape

3D drawing dolls can have their body shape changed. Furthermore, the body shape data of a 3D drawing doll can be registered in a [Material] palette as a material and used repeatedly.

Changing a 3D Drawing Doll Body Shape

3D drawing dolls can have their body shape changed. Since you can change by part, you can change the ratio of length of the head to total height for a character, for example.

1 Select the tool

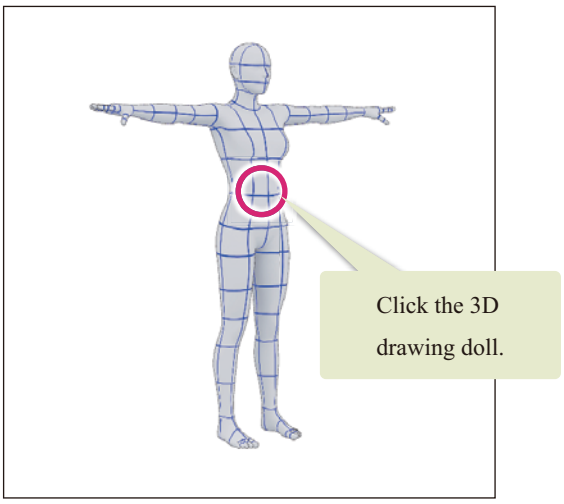
On the [Tool] palette, select the [Operation] tool.

2 Select the sub tool

Open the [Sub tool] palette to select [Object].

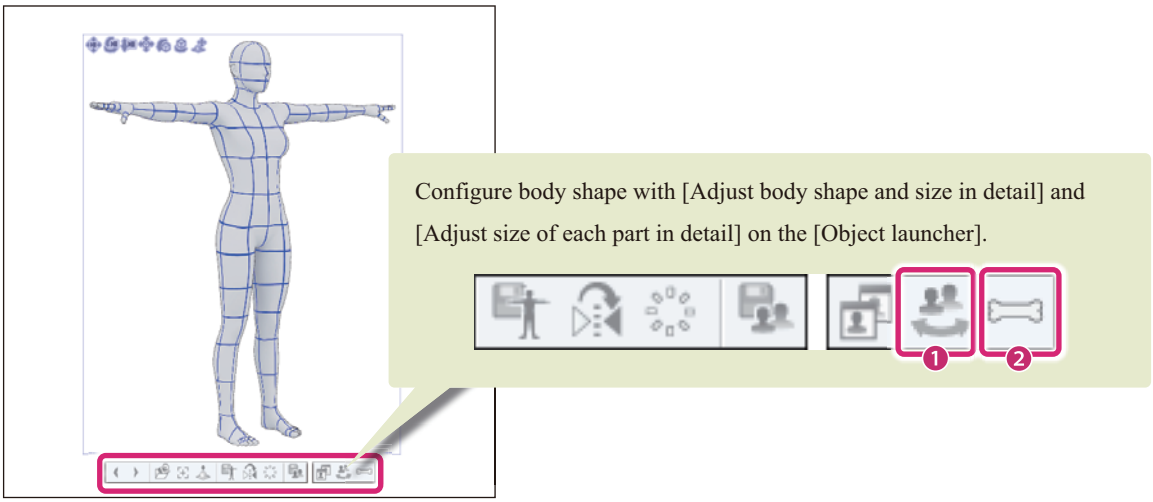
3 Select the 3D material

Click the 3D drawing doll whose body shape yuou want to change.



4 Change the body shape

Change the body shape with the [Object launcher] for the 3D drawing doll.

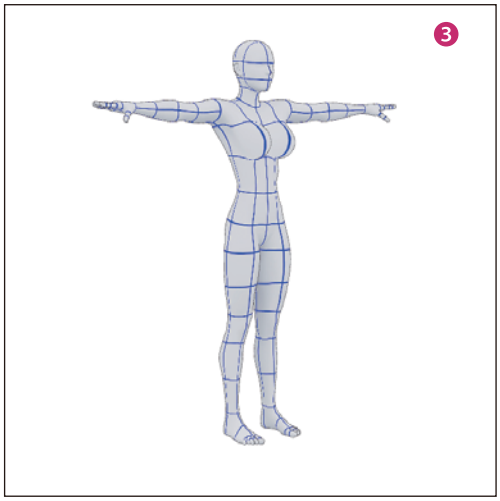

Configure body shape with [Adjust body shape and size in detail] and [Adjust size of each part in detail] on the [Object launcher].
1
2

(1) Click [Adjust body shape and size in detail] to configure the overall body shape.

(2) Click [Adjust size of each part in detail] to adjust the size by part.

Memo

For items on the [Object launcher], see "Operations Using the Object Launcher" → "When a 3D Drawing Doll Is Selected" .



(3) The body shape of the 3D drawing doll is changed.

Registering a 3D Drawing Doll Body Shape

The body shape data of a 3D drawing doll can be registered in a [Material] palette as a material.

Memo

In this example, only the 3D drawing doll's body shape will be registered. To register its pose, it should be registered as pose material separately. For how to register a pose, see "Registering the Pose of a 3D Character or 3D Drawing Doll" .

1 Select the tool

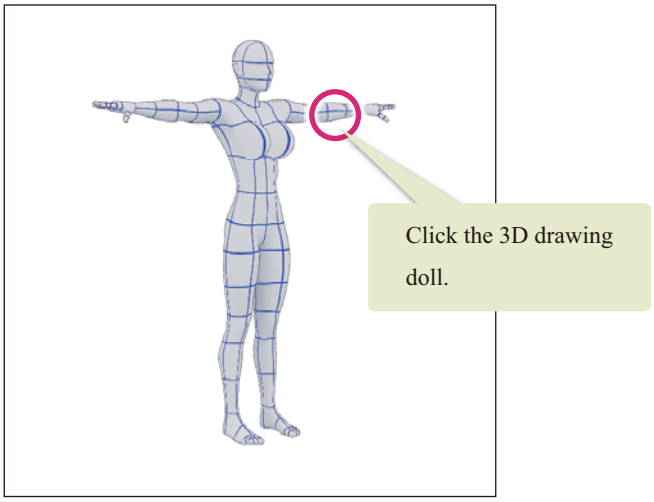
On the [Tool] palette, select the [Operation] tool.

2 Select the sub tool

Open the [Sub tool] palette to select [Object].

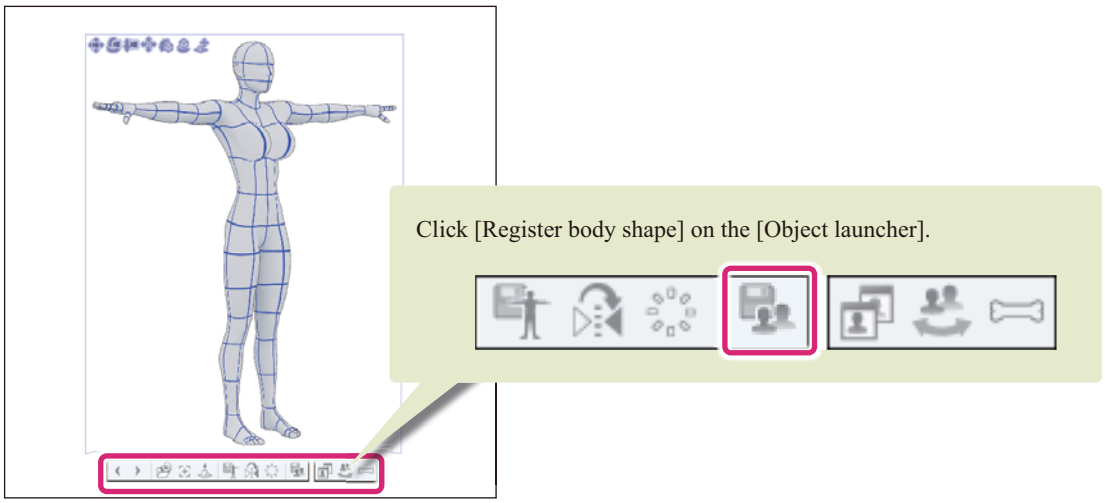
3 Select the 3D drawing doll

Click the 3D drawing doll to register.



4 Register the 3D drawing doll

Click [Register body shape] on the [Object launcher].



5 Configure the material

The [Material property] dialog box displays. Configure the settings for the material on the dialog box.

(1) Configure settings such as name, save destination, tag for search and the like for the material.

(2) Click [OK].

Memo

For details on the [Material property] dialog box, see "[Material property] Dialog Box" .

6 The registration of the body shape is complete

The dialog box closes and the body shape is registered in the [Material] palette as configured.

Importing a Registered 3D Drawing Doll

To import the body shape data of a registered 3D drawing doll to a 3D drawing doll, proceed as follows.

1 Select the tool

On the [Tool] palette, select the [Operation] tool.

2 Select the sub tool

Open the [Sub tool] palette to select [Object].

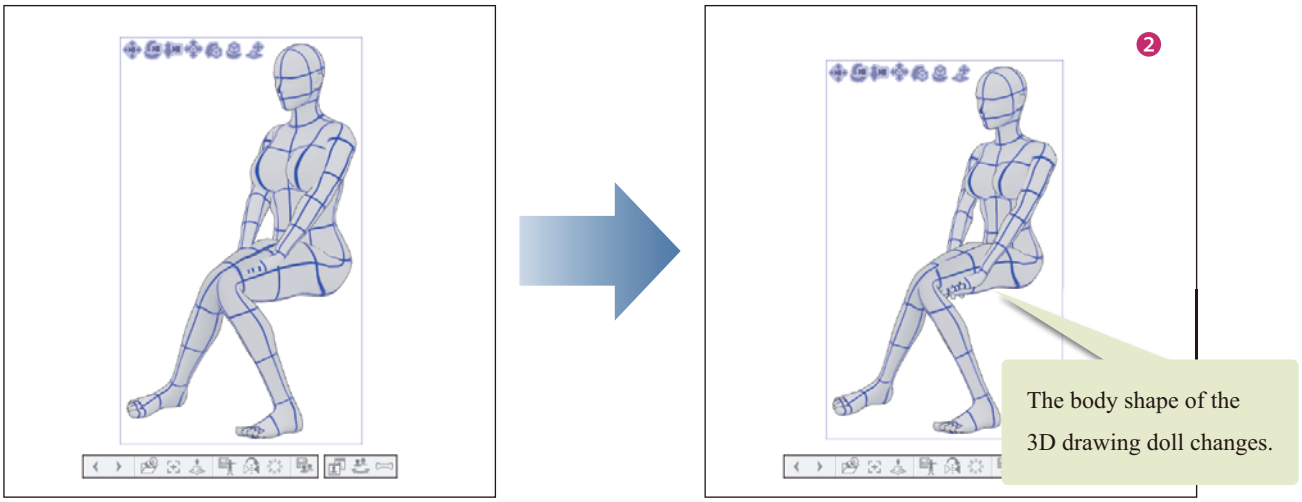
3 Select the 3D drawing doll

Click the 3D drawing doll whose body shape you want to import.

4 Import the body shape

Import the registered body shape data from the [Material] palette.

(1) Drag and drop to the 3D drawing doll on the canvas.



(2) The body shape of the 3D drawing doll changes.

Deciding the Position of a 3D Background Material

The display size and position of a 3D background material can be changed in accordance with the work.

Important **The position of a 3D background material is linked with the camera position. For this reason, it affects the positions of 3D materials within the same 3D layer.**

Selecting a 3D Background Material

To select a 3D background material using the [Object launcher] when a 3D layer including multiple 3D materials is selected, proceed as follows.

1 Select the tool

On the [Tool] palette, select the [Operation] tool.

2 Select the sub tool

Open the [Sub tool] palette to select [Object].

3 Select the 3D layer

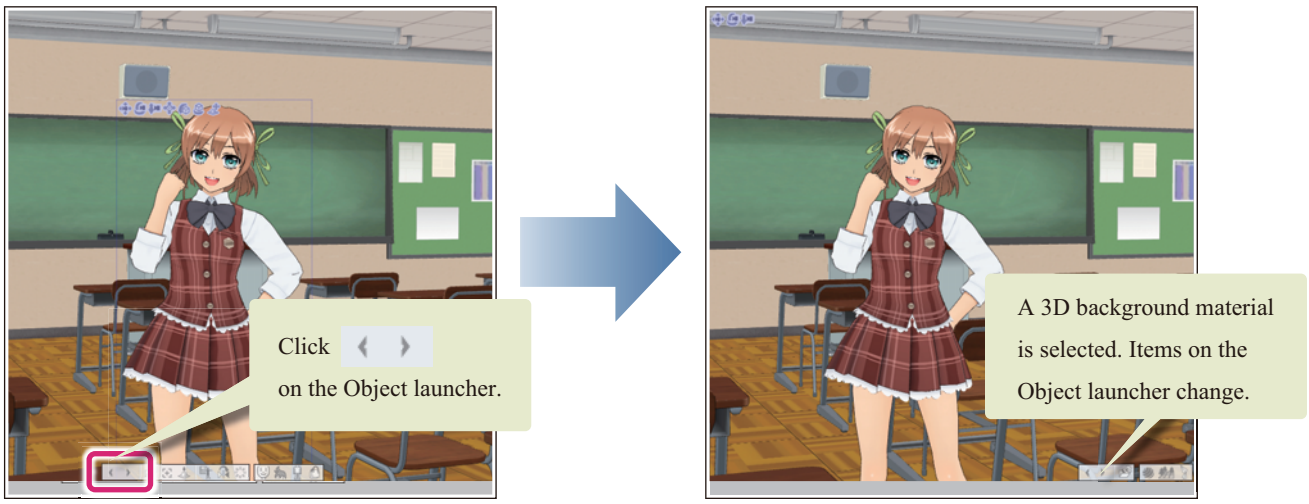
On the [Layer] palette, select the 3D layer to edit.

Memo **If the 3D layer does not include any 3D material, the 3D background material is selected at this point.**

4 Operate the Object launcher

Click [Select previous 3D object] or [Select next 3D object] on the [Object launcher].

Repeat the same operation until the 3D background material is selected.



Selecting a Camera Angle for a 3D Background Material

3D background materials come with preconfigured angles. You can configure the camera angle for the 3D background material just by selecting an angle.

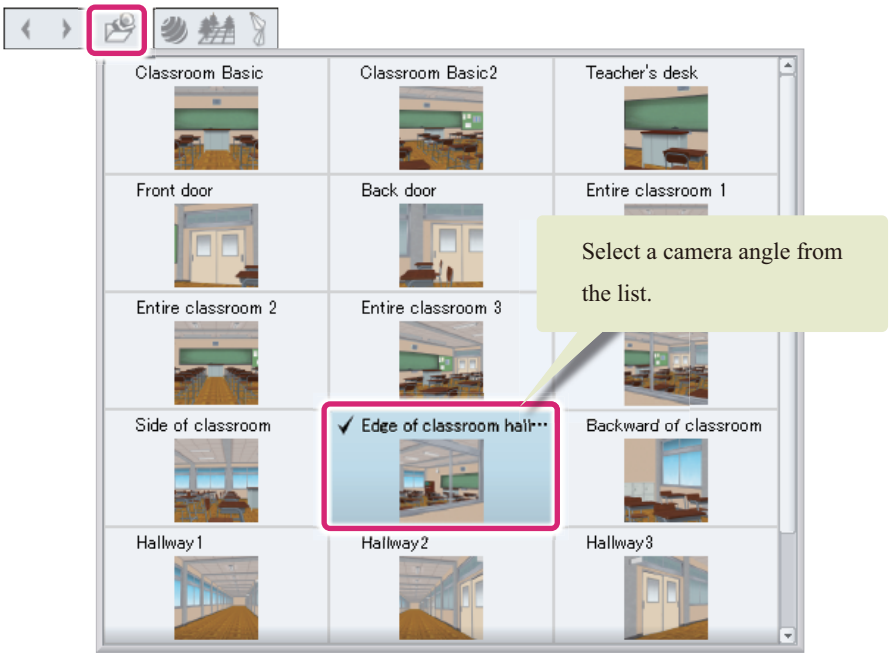
1 Select the 3D background material

Select the 3D background material to edit.

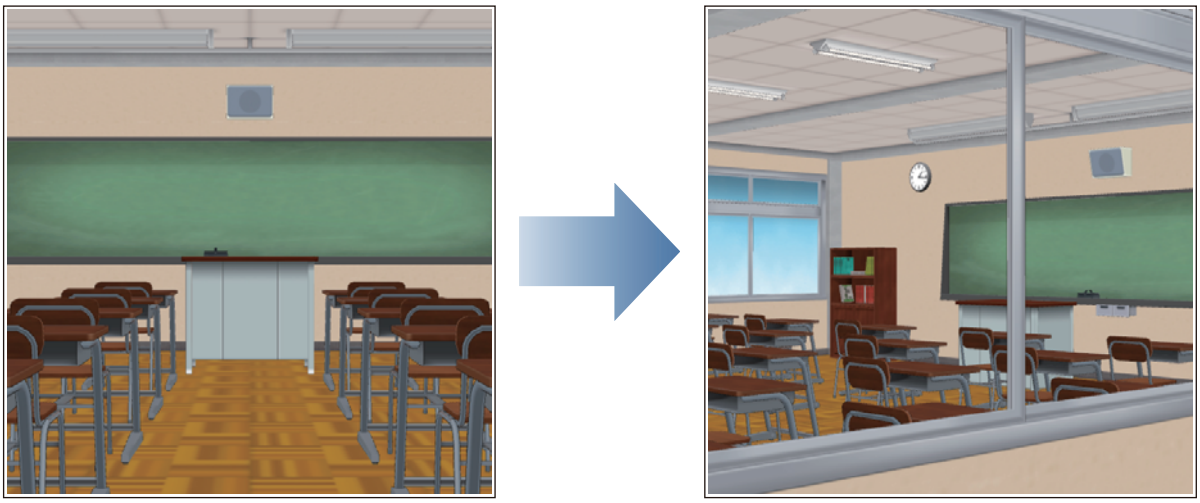
Memo For how to select a 3D background material, see "Selecting a 3D Background Material" .

2 Select the camera angle

Click [Camera] on the [Object launcher]. Select a camera angle from the list that displays.



The selected camera angle is reflected in the 3D material.



Moving and Rotating a 3D Background Material

The procedure to move and/or rotate a 3D background material is the same as that for the camera. For details, see "Operations Using the Movement Manipulator" .

Important

Moving and/or rotating a 3D background material may darken the 3D background material view. Changing the settings on the list displayed by clicking [Layout] on the [Object launcher] may improve the view. For details, see "Operations Using the Object Launcher" under "When a 3D Background Material Is Selected" .
If the view does not improve, select a camera angle from [Camera] on the [Object launcher] and adjust again. For details, see "Selecting a Camera Angle for a 3D Background Material" .

Deciding the Camera Position

The camera control of Manga Studio 5.0 can display 3D materials in various positions and angles. You can change the position and angle of the camera, as well as adjust the composition when finishing the work.

Memo

Changing the camera position and/or angle for a 3D material automatically changes the perspective ruler created on the 3D layer. ()

Selecting a Camera Angle

Manga Studio 5.0 comes with preconfigured camera angles for 3D materials. You can configure the camera angle for the 3D material just by selecting a camera angle.

Memo

To select a camera angle for a 3D background material, see "Selecting a Camera Angle for a 3D Background Material" .

1 Select the tool

On the [Tool] palette, select the [Operation] tool.

2 Select the sub tool

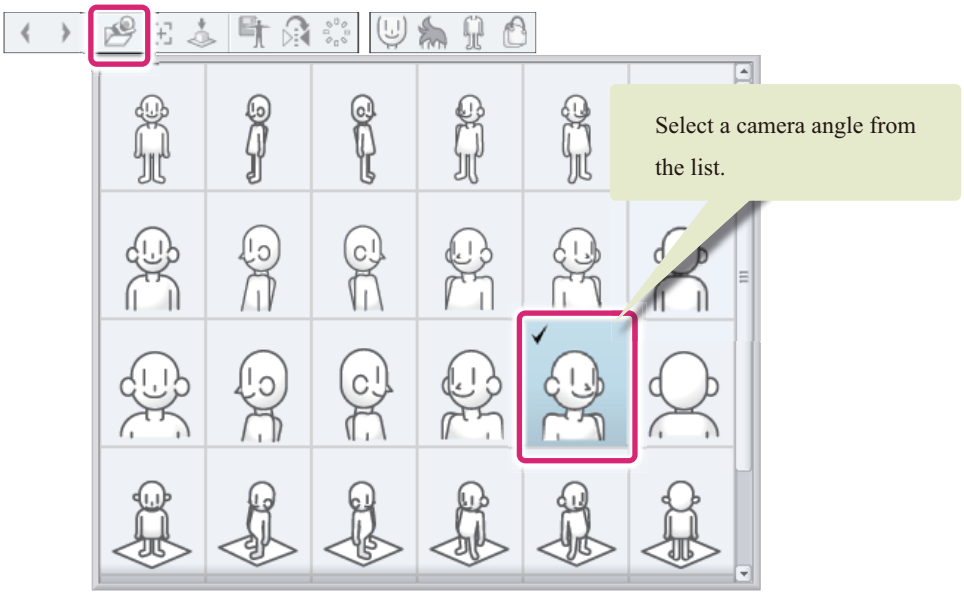
Open the [Sub tool] palette to select [Object].

3 Select the 3D layer

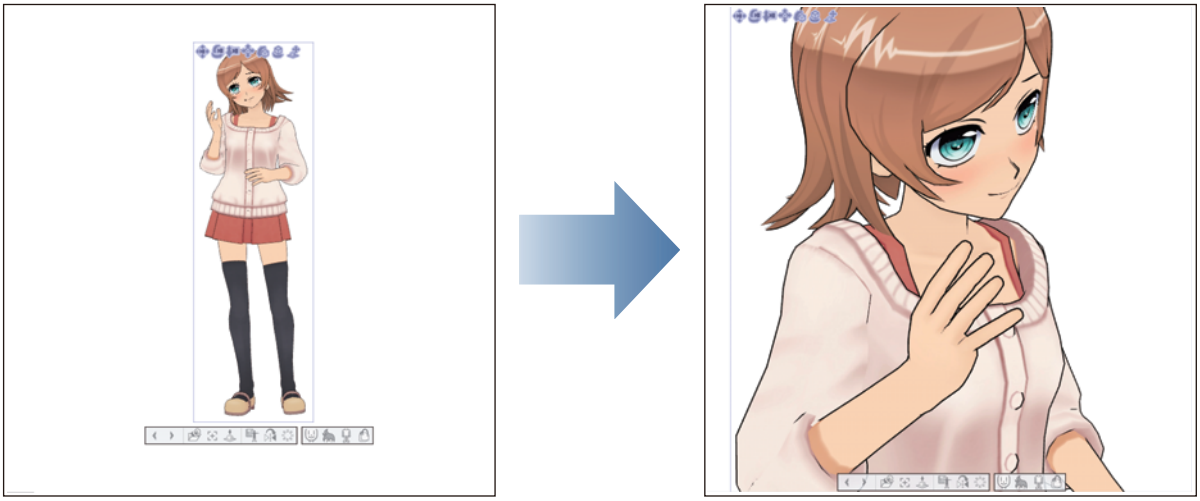
On the [Layer] palette, click the 3D layer to edit.

4 Select the camera angle

Click [Camera] on the [Object launcher]. Select a camera angle from the list that displays.



The selected camera angle is reflected in the 3D material.



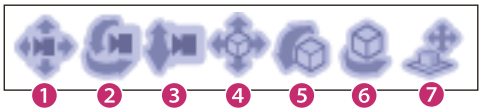
Memo For how to operate the camera, see "Operations Using the Movement Manipulator" .

Operations Using the Movement Manipulator

The [Movement manipulator] is a series of buttons to edit a selected 3D material or 3D layer. It is displayed in the upper part of a 3D material selected using the [Object] tool. Placing the mouse cursor over a button and dragging it allows you to change the position or angle.

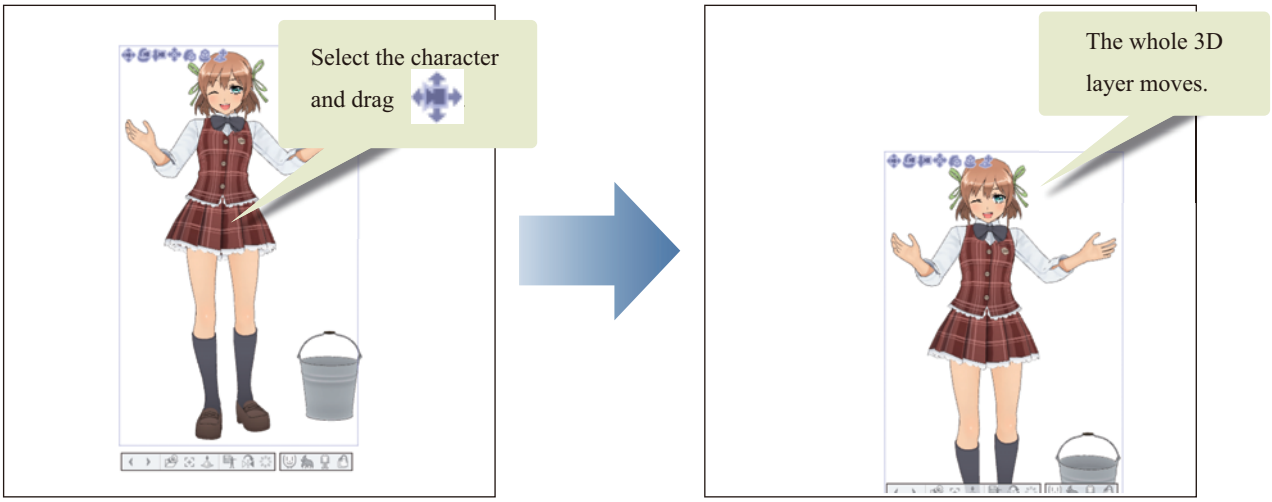
Functions of the Movement Manipulator

This section describes the functions of the movement manipulator.



(1) Translate camera

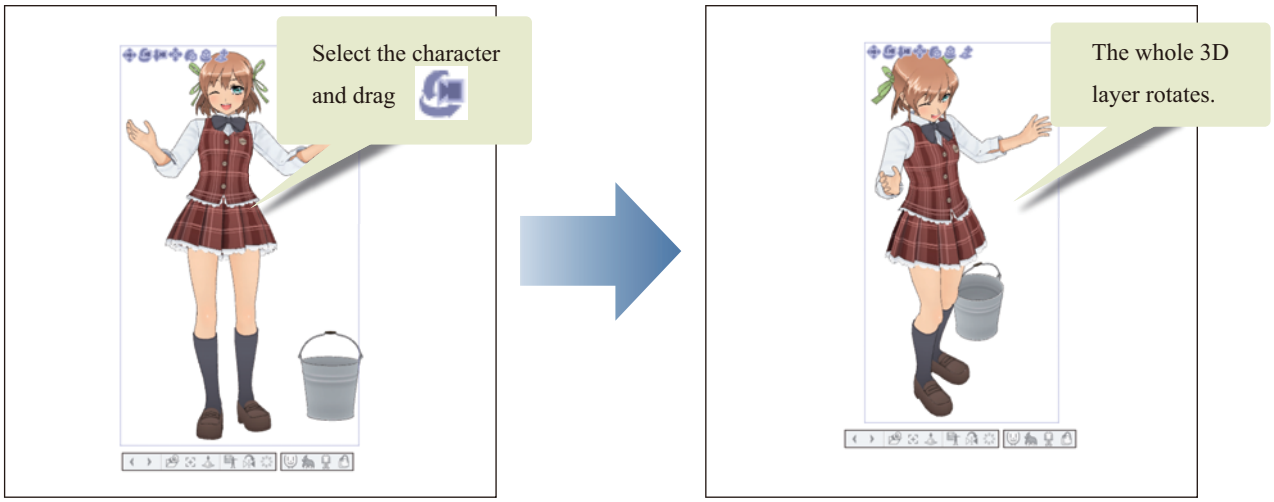
Translates the 3D layer camera up and down, and left and right



Memo **You can also translate the camera by dragging the canvas wheel.**

(2) Rotate camera

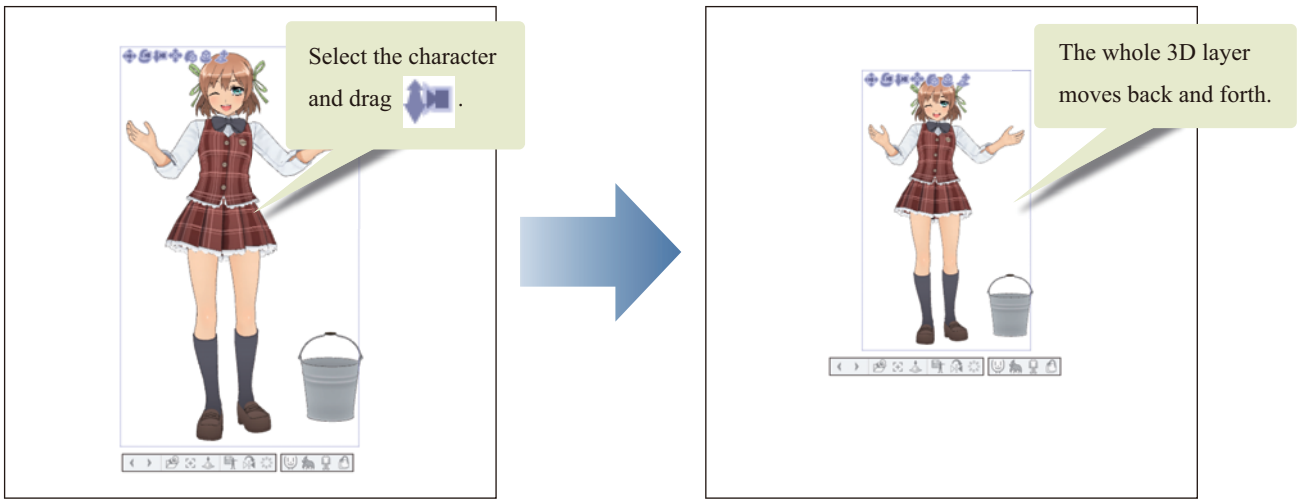
Rotates the 3D layer camera up and down, and left and right.



Memo **Dragging on the canvas with the [Object] sub tool after turning on [Rotate 3D camera] by selecting [Operation of transparent part] on the [Tool property] pallete allows you to rotate the camera.**

(3) Move camera back and forth

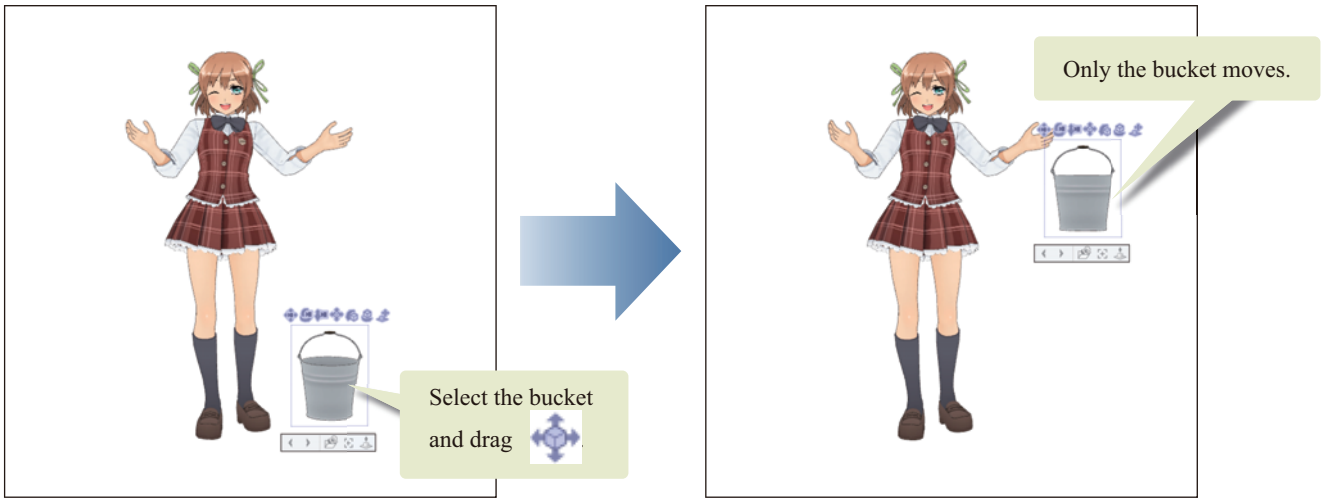
Moves the 3D layer camera back and forth.



Memo **You can also move the camera back and forth by right dragging the canvas.**

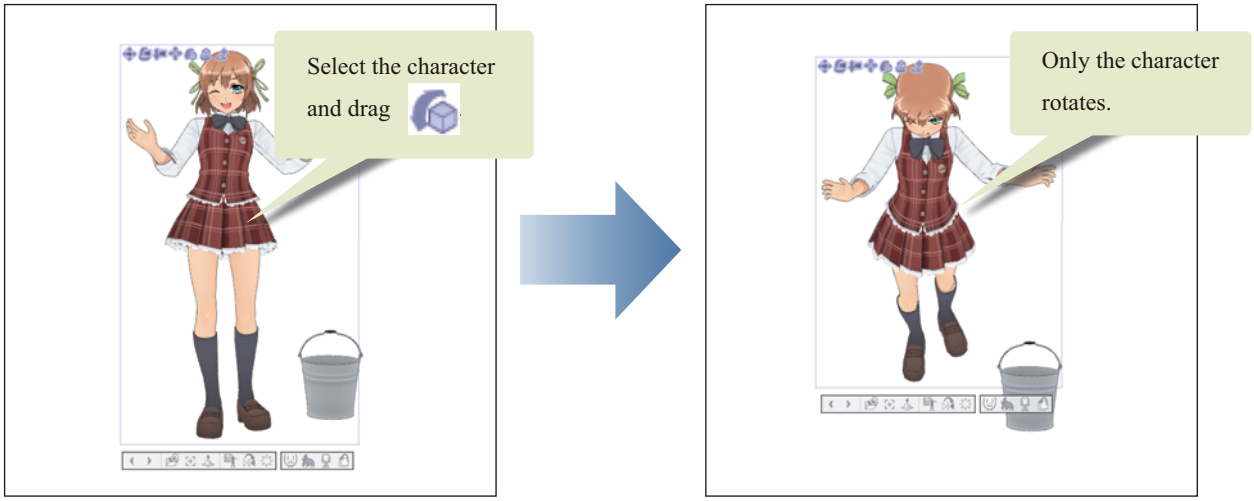
(4) Move 3D material

Moves the selected 3D material up and down, and left and right. This item is not displayed when a 3D background material is selected.



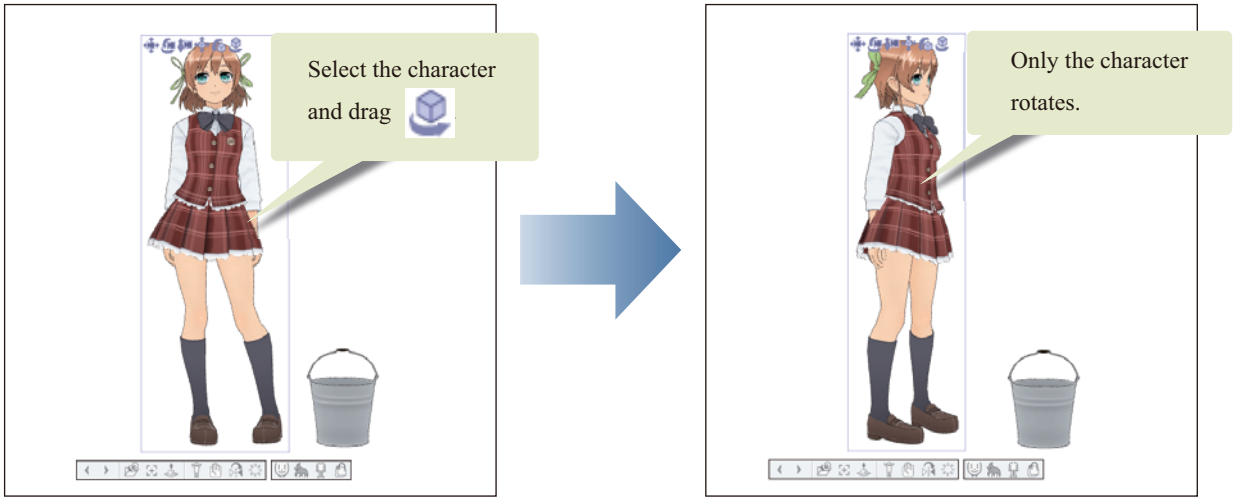
(5) Rotate 3D material vertically

Rotates the selected 3D material vertically. This item is not displayed when a 3D background material is selected.



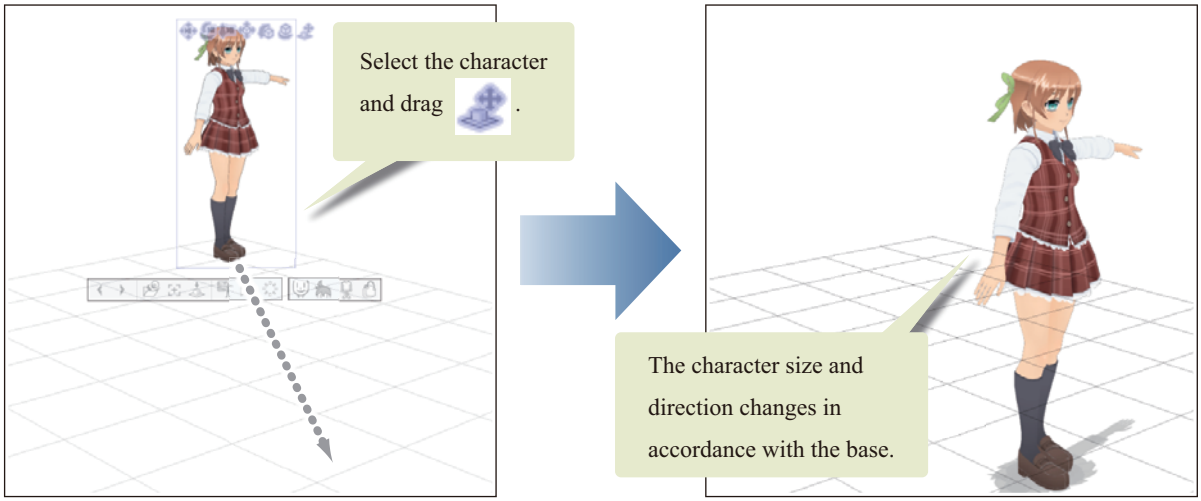
(6) Rotate 3D material horizontally

Rotates the selected 3D material horizontally. This item is not displayed when a 3D background material is selected.



(7) Snap 3D material to base

Moves the 3D material snapped to the base of the 3D space (floor) or a nearby 3D material. Changes the display size and direction of the 3D material in accordance with the position to which it has been moved. This item is not displayed when a 3D background material is selected.



Memo

Base of the 3D space means the grid displayed when a 3D material is clicked. It is equivalent to the floor of the 3D space.

Operations Using the Object Launcher

[Object launcher] is a launcher displayed in the lower part of a 3D material selected using the [Object] tool. Displayed buttons vary depending on the selected 3D material type. The function of each button is as described below.

Buttons Common to All 3D Materials

Selecting a 3D material displays the following buttons.

Memo **Some of the buttons may not display depending on the selected 3D material.**

(1) Select previous 3D object

When multiple 3D materials are included in a 3D layer, switches the selected 3D material.

(2) Select next 3D object

When multiple 3D materials are included in a 3D layer, switches the selected 3D material.

(3) Camera

Click to display a list of camera angles. Select the camera angle to use in the 3D layer.

(4) Focus on editing target

Moves the camera in such a way that the selected 3D material is displayed in the center of the 3D space.

When a 3D character material or a part of a 3D pose model is selected, the selection is displayed in the center.

This item is not displayed when a 3D background material is selected.

(5) Ground

Grounds the 3D material to the base (floor) of the 3D space. This item is not displayed when a 3D background material is selected.

Memo **Base of the 3D space means the grid displayed when a 3D material is clicked. It is equivalent to the floor of the 3D space.**

When a 3D Character Material Is Selected

Selecting a 3D character material or 3D pose model displays the following additional buttons.

(1) Register pose

Registers the pose of the 3D character material or 3D pose model in the [Material] palette.

(2) Flip horizontal

Horizontally reverses the pose of the 3D character material or 3D pose model.

(3) Initial pose

Resets the pose settings to the initial pose.

(4) Enable/disable physical calculation

Enables/disables physical calculation for a 3D character with physical settings imported from CLIP STUDIO COORDINATE.

If enabled, physical calculations are reflected when the 3D character is moved.

Memo

- **For details on CLIP STUDIO COORDINATE, see the Creative Activity Support Site "CLIP(Japanese only)" (http://www.clip-studio.com/clip_site/).**
- **Importing a 3D character material with physical settings may slow Manga Studio 5.0. Turning off [Enable/disable physical calculation] may improve the processing speed.**

(5) Face part

Click to display a list of face parts for the character. Select the desired face part for the selected 3D character material. This item is not displayed when a 3D pose model material is selected.

(6) Facial expression list

Click to display a list of facial expressions for the character. Select the desired facial expression for the selected 3D character material. This item is not displayed when a 3D pose model material is selected.

(7) Hair

Click to display a list of hair styles for the character. Select the desired hair style for the selected 3D character material. This item is not displayed when a 3D pose model material is selected.

(8) Body

Click to display a list of bodies (clothes) for the character. Select the desired body for the selected 3D character material. This item is not displayed when a 3D pose model material is selected.

(9) Accessories

Click to display a list of accessories for the character. Select the desired accessory(accessories) for the selected 3D character material. This item is not displayed when a 3D pose model material is selected.

When a 3D Drawing Doll Is Selected

Selecting a 3D drawing doll displays the following additional buttons.

(1) Register pose

Registers the 3D drawing doll pose in the [Material] palette.

(2) Flip horizontal

Horizontally reverses the 3D drawing doll pose.

(3) Initial pose

Resets the pose settings to the initial pose.

(4) Register body shape

Registers the configured 3D drawing doll's body shape in the [Material] palette.

(5) Simple body shape and size adjustment

Allows you to adjust the body shape by dragging the "□" within the square area.

Moving up and down the slider on the right allows you to adjust the ratio of length of the head to total height.

(6) Detailed body shape adjustment

Click to adjust the body shape of the 3D drawing doll and make it [Fatty], [Slim], and so on. Adjust the strength of the effect using the sliders.

(7) Part size adjustment

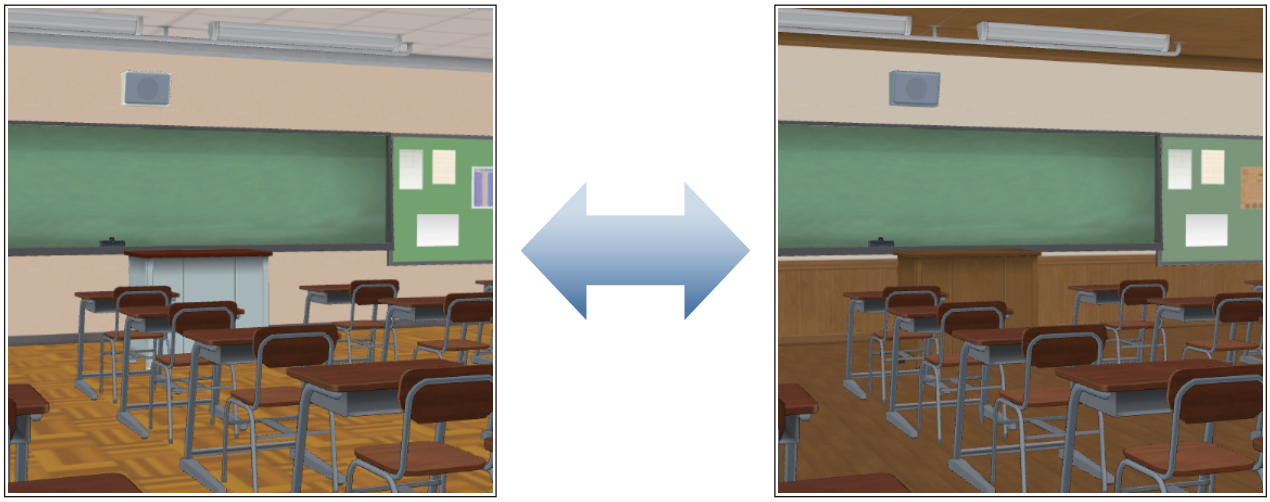
Click to adjust the length and thickness by part of the 3D drawing doll. Adjust the strength of the effect using the sliders. The figures below show an example of head and neck adjustment.

When a 3D Background Material Is Selected

Selecting a 3D background material displays the following additional buttons.

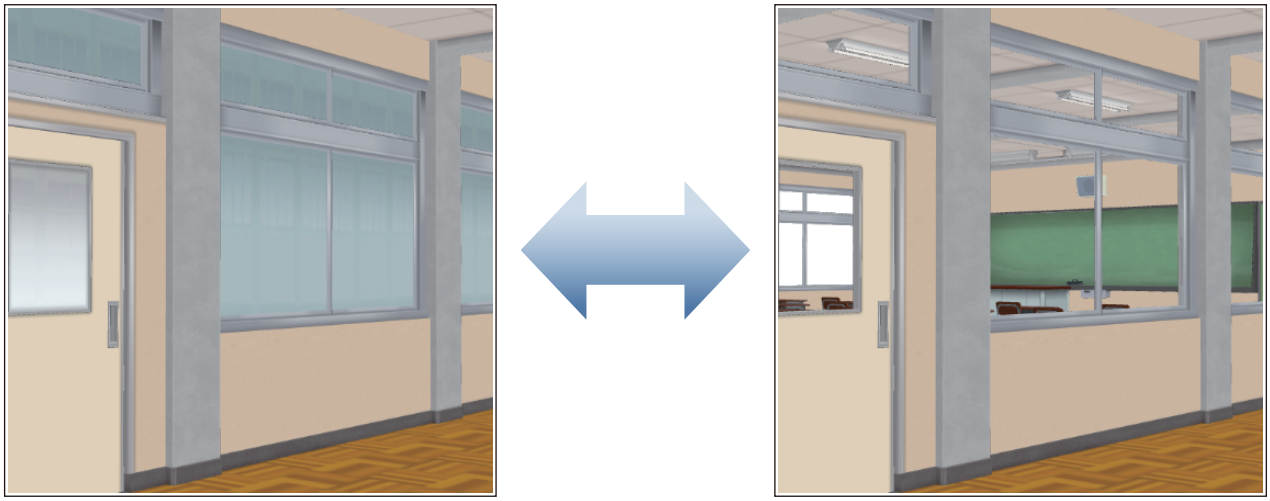
(1) Material

Click to display a list of materials. Select the desired material for the selected 3D background material. Selecting a material allows you to change the tone and texture of the 3D background material.



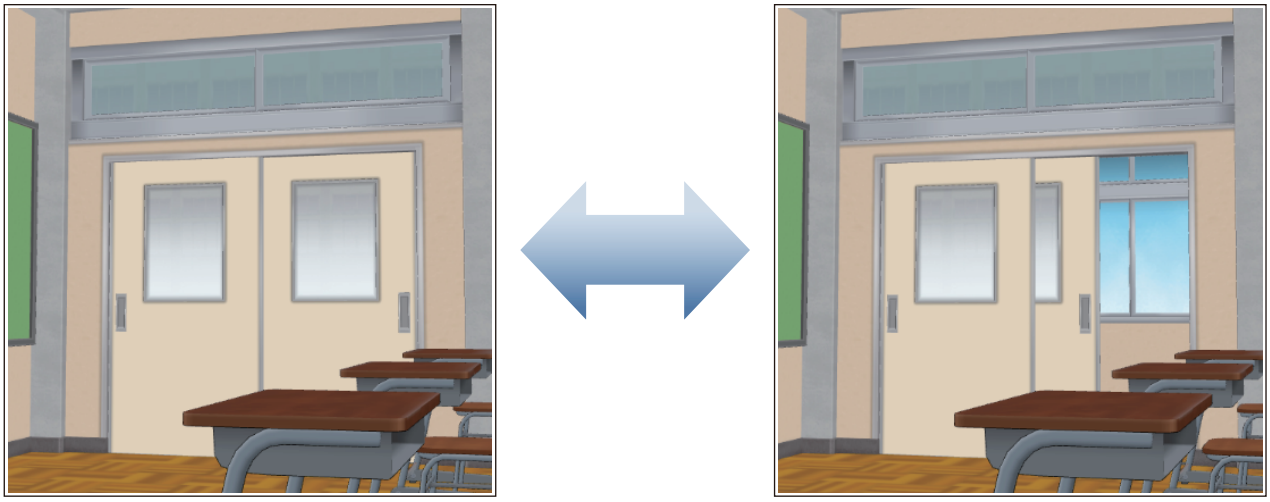
(2) Layout

Click to display a list of layouts. Select the desired layout for the selected 3D background material. Changing the layout allows you to hide certain parts or change some parts.



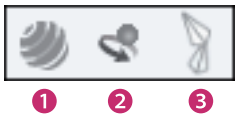
(3) Moving part

Click to display a list of moving parts. Adjust the position of the moving part using the sliders.



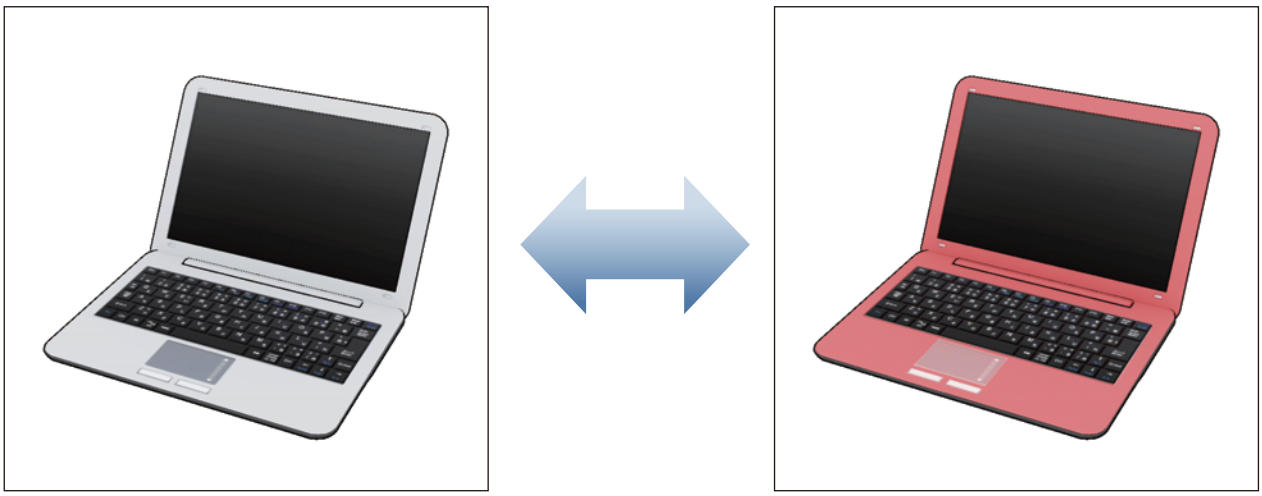
When a 3D Item Material Is Selected

When a 3D item material is selected, the following additional buttons are displayed:



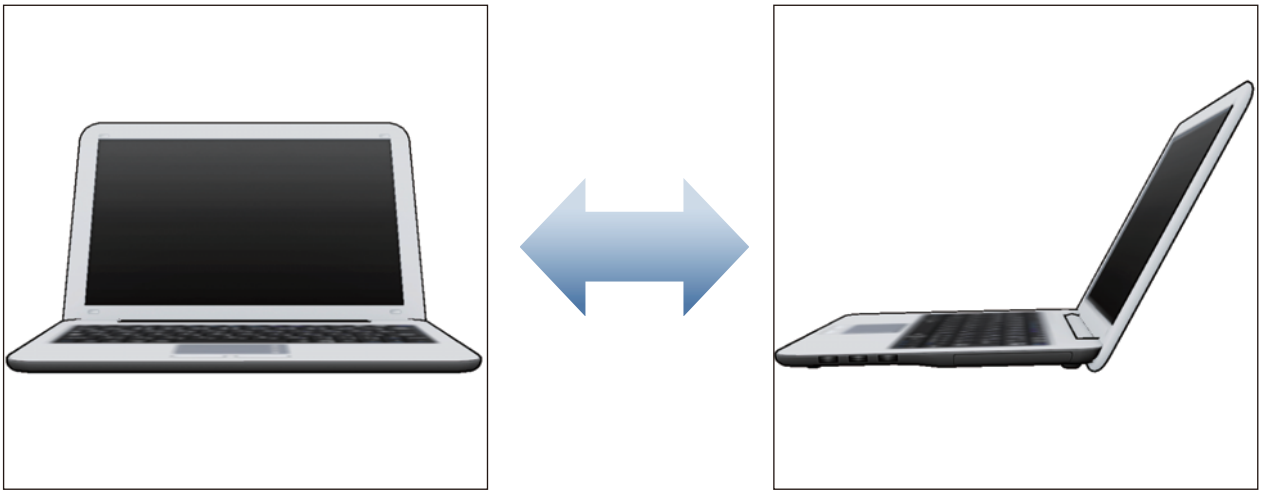
(1) Material

Clicking [Material] displays a list of materials. Select the desired material to apply to the selected 3D item material. Selecting a material allows you to change the tone and texture of the 3D item material.



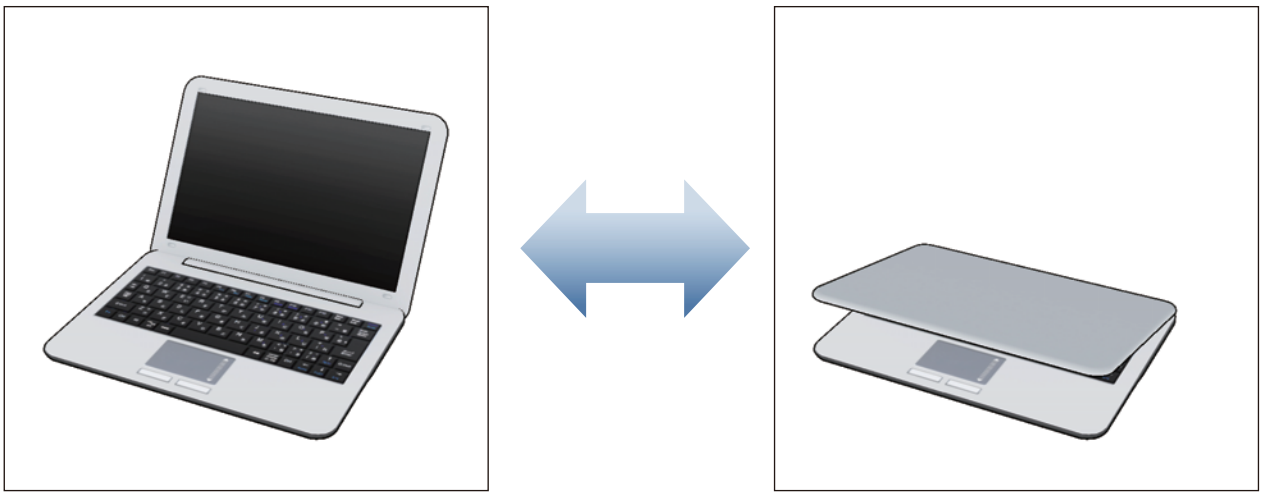
(2) Rotate

Clicking [Rotate] displays a list of orientation of the 3D item material. Select the desired orientation to apply to the selected 3D item material.



(3) Moving part

Clicking [Moving part] displays a list of moving parts. A slider can be used to adjust the position of a moving part.



When QUMARION Is Connected

When QUMARION is connected, selecting a 3D character material or 3D pose model displays the following additional buttons.

One QUMARION connected

Multiple QUMARION connected

Memo

For QUMARION product information, see the following site (Japanese only):
http://www.clip-studio.com/quma/

(1) Enable QUMARION

Enables/disables input from QUMARION. When multiple QUMARION are connected, as many [Enable QUMARION] as the number of connected QUMARION will display.

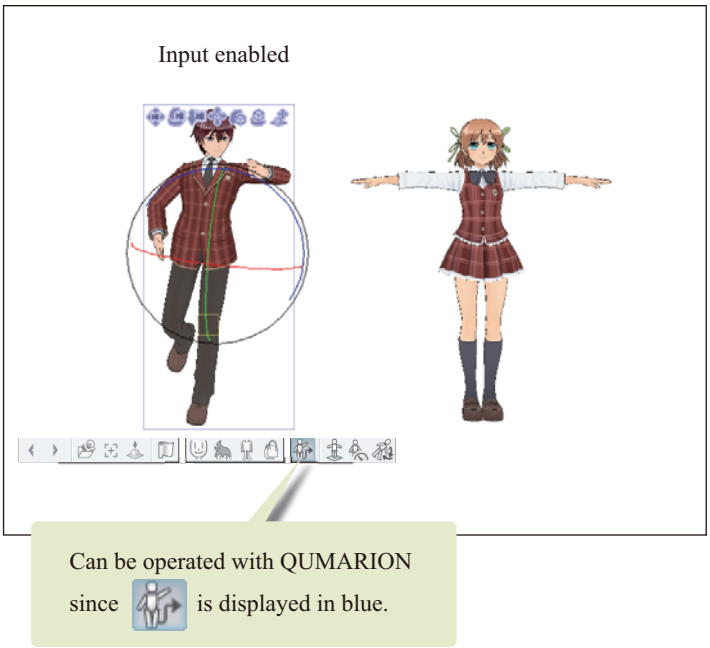
- When turned on, input from the selected QUMARION is enabled, and the pose of the 3D character material can be created by operating from the selected QUMARION.
- When turned off, input from the selected QUMARION is disabled, and the pose of the 3D character material is created by operating the mouse.

Important

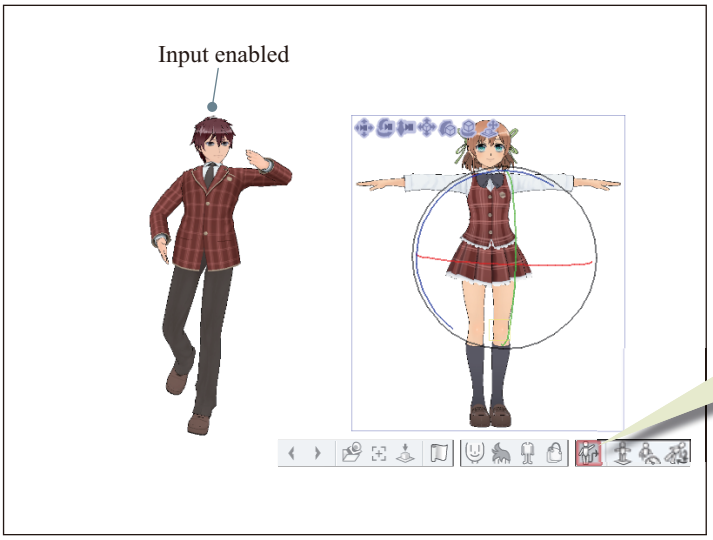
You can connect up to 5 QUMARION.

When there are multiple 3D characters, the operation becomes as follows.

In this example, two 3D characters, one "male student" for which input from QUMARION is enabled, and one "female student" are assumed.



When the "male student" is selected, [Enable QUMARION] is displayed in blue. When displayed in blue, the selected 3D character material can be operated with QUMARION.


Input enabled
Cannot be operated with QUMARION since is displayed in red.
Clicking this button again makes the button become blue (, enabling operation with QUMARION.
In this case, input to “male student” is disabled.

When the "female student" is selected, [Enable QUMARION] is displayed in red. If [Enable QUMARION] is turned on for the "female student", [Enable QUMARION] will display in blue, enabling operation of the "female student" with QUMARION. In this case, input to the "male student" is disabled.

(2) Always ground

When turned on, the 3D character material will always be grounded to the base of the 3D space (floor) when operated with QUMARION.

(3) Calibration

Allows creating a pose by QUMARION from the pose of the 3D character material on the screen.

In normal operations, clicking [Enable QUMARION] aligns the pose of the 3D character material on the screen to the current pose of QUMARION.

Clicking [Calibration] before clicking [Enable QUMARION] allows you to create a pose by QUMARION from the pose of the 3D character material on the screen.

Memo

- **To correct a previously created pose, you must first align the pose of QUMARION to that of the 3D character material on the screen without moving it. You can continue creating the pose on the screen by using [Calibration] after approximating the pose of QUMARION to that displayed on the screen.**
- **[Calibration] is possible even when the pose of QUMARION is not aligned with that of the 3D character material displayed on the screen. For details on how to calibrate, see "Explanation: When Displayed 3D Character Is Misaligned" .**

(4) Acceleration sensor

When turned on, the acceleration sensor embedded in QUMARION is enabled.

Operations Using QUMARION

Manga Studio 5.0 supports QUMARION. Creating the pose with QUMARION allows you to operate the 3D character material more intuitively.

Important

Do not connect/disconnect QUMARION to/from your computer while Manga Studio 5.0 is running. Doing so may destabilize Manga Studio 5.0.

Memo

- **For how to connect or operate QUMARION, see the manuals supplied with QUMARION.**
- **You can adjust how QUMARION operates from the [Object launcher]. For details, see "Operations Using the Object Launcher" → "When QUMARION Is Connected" .**
- **For QUMARION product information, see the following site (Japanese only) : http://www.clip-studio.com/quma/**

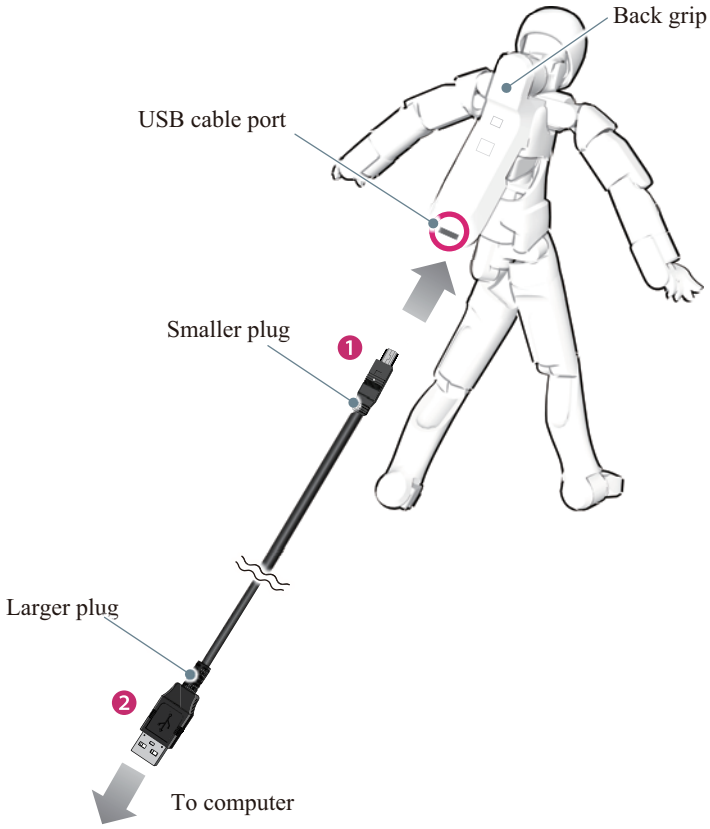
Connecting QUMARION

To connect QUMARION to a computer, proceed as follows.

Important **If Manga Studio 5.0 is running, be sure to quit before connecting QUMARION.**

1 Connect QUMARION

Connect QUMARION to your computer using the supplied USB cable.



(1) The USB cable connection port on QUMARION side is located in the lower part of the grip on the back. Connect the smaller plug of the supplied USB cable to QUMARION.

(2) Connect the larger plug of the supplied USB cable to a USB port on your computer.

Important

- **The driver may install automatically when QUMARION is connected for the first time. Install the driver by following the on-screen instructions.**
- **When connected through a USB hub, QUMARION may not work correctly. Therefore, direct connection to a USB port on your computer is recommended.**
- **The shape of the USB cable connection port on QUMARION is narrow. You may not be able to connect properly using a commercially available USB cable.**
- **When connecting, be careful about the connector orientation. Inserting an inverted connector forcefully may damage QUMARION and/or your computer.**

2 Start the application

Start Manga Studio 5.0.

Using QUMARION

To add pose to a 3D character material, 3D drawing doll and the like using QUMARION, proceed as follows.

1 Select the command

Select [Use QUMARION] from the menu.

- Windows users: Select [File] menu → [QUMARION] → [Use QUMARION].
- Mac OS X users: Select [Manga Studio 5.0] menu → [QUMARION] → [Use QUMARION].

Memo

You will not be able to use QUMARION without turning on [Use QUMARION]. Once turned on, [Use QUMARION] remains enabled until you quit Manga Studio 5.0.

2 Import the 3D character material

Create a new canvas and import the 3D character material to the canvas.

3 Enable QUMARION

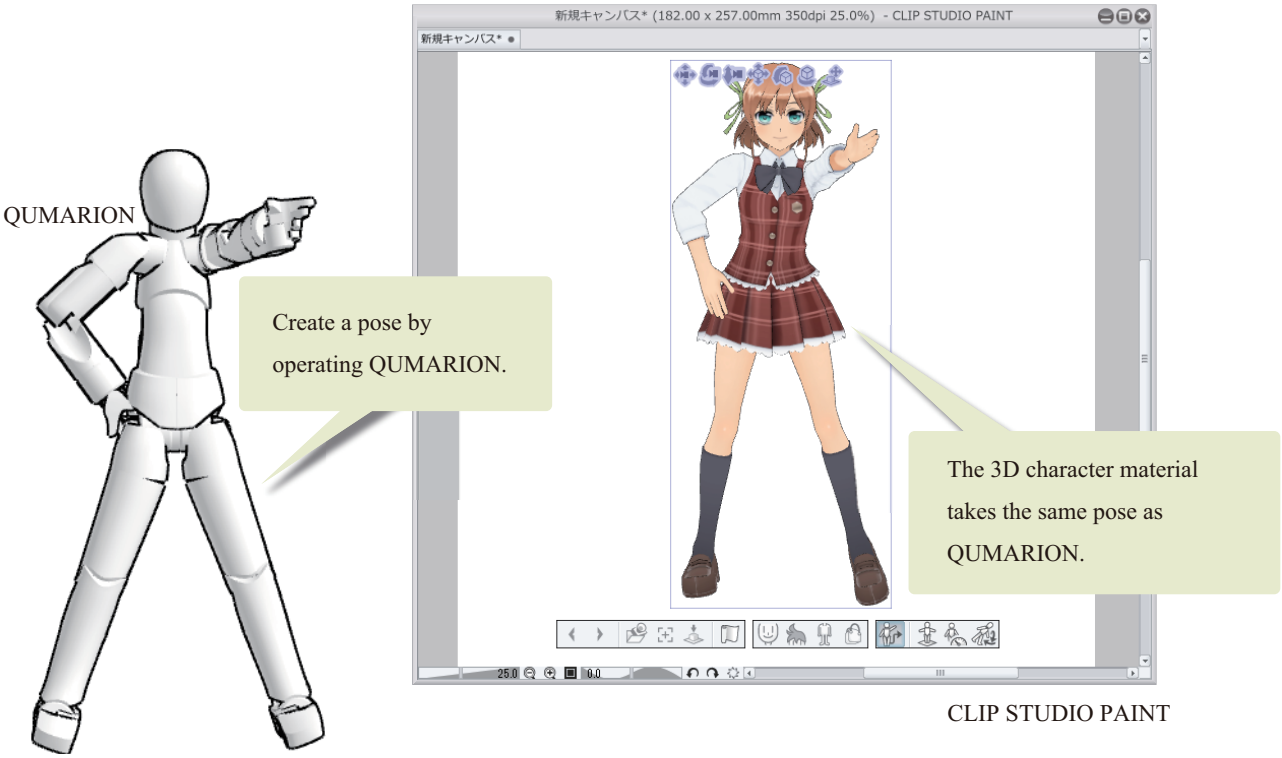
On the [Object launcher], click [Enable QUMARION] for the QUMARION to operate. Input from the selected QUMARION is enabled so that the Manga Studio 5.0 3D character material can be operated from QUMARION.

One QUMARION connected

Multiple QUMARION connected

4 Create a pose with QUMARION

Operate the QUMARION. The 3D character material imported to the canvas automatically takes the same pose.


QUMARION
Create a pose by operating QUMARION.
新規キャンバス* (182.00 x 257.00mm 350dpi 25.0%) - CLIP STUDIO PAINT
新規キャンバス*
The 3D character material takes the same pose as QUMARION.

CLIP STUDIO PAINT

Memo

You can adjust how QUMARION operates from the [Object launcher]. For details, see "Operations Using the Object Launcher" → "When QUMARION Is Connected" .

5 Disable QUMARION

When you are satisfied with the 3D character pose, click [Enable QUMARION] on the [Object launcher]. The input from QUMARION is disabled.

Disconnecting QUMARION

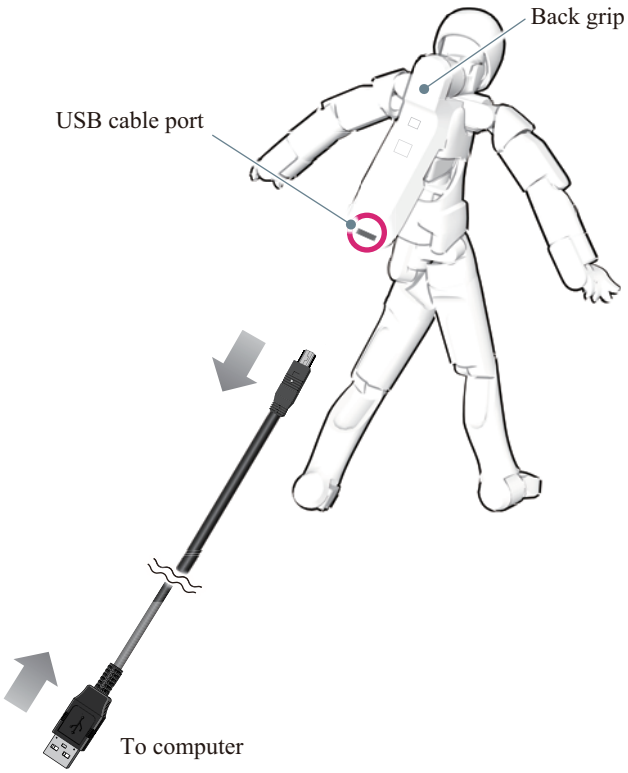
To disconnect QUMARION from the computer, proceed as follows.

1 Quit the application

Close Manga Studio 5.0.

2 Disconnect QUMARION

Unplug the USB cable from QUMARION.



Operations Using Palettes

The [Tool property] palette, [Sub tool detail] palette and [Layer property] palette allow you to configure detailed settings for 3D materials.

Memo

The [Sub tool detail] palette is a palette that displays when [Window] menu → [Sub tool detail] is selected. It allows for more detailed settings than the [Tool property] palette. [Tool property] palette settings and [Sub tool detail] palette settings with the same name are the same settings.

Sub tool detail Palette (When a 3D Item Material Is Selected)

When a 3D item material is selected using [Object] of the [Operation] tool, the [Tool property] palette and [Sub tool detail] palette can be used to configure the position, size and the like for the 3D item material.

Operating Procedure

To change the camera angle and size of the 3D item material using the [Tool property] palette, proceed as follows.

1 Select the 3D item material

Select [Object] for [Operation] tool, then click the 3D item material to edit.

2 Configure on the tool property palette

On the [Tool property] palette, configure [Camera angle] and the like.

(1) Select a camera angle from [Angle preset] for [Camera].

(2) Fine adjust the display size of the 3D item material with [Object scale].

Memo

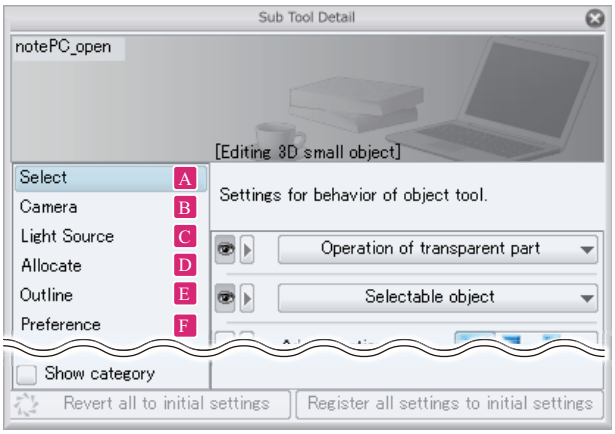
Displaying the [Sub tool detail] palette from [Sub tool detail] on the [Tool property] palette will allow you to configure in more detail. For details on settings on the [Tool property] palette and [Sub tool detail] palette, see "Sub tool detail Palette Settings (When a 3D Item Material Is Selected)" .

3 The settings are reflected

The settings are reflected in the 3D item material on the canvas.

Sub tool detail Palette Settings (When a 3D Item Material Is Selected)

When a 3D item material is selected using [Object] of the [Operation] tool, the following settings are available on the [Sub tool detail] palette. Click each category to change the settings displayed on the palette.



Memo

Categories can be displayed on the [Tool property] palette. Displaying categories is recommended if you want to check the settings on the [Tool property] palette. The method to show categories is as follows.

- **Turn on [Show category] on the [Sub tool detail] palette**
- **Open the menu of the [Tool property] palette and turn on [Show category]**

A. Select

Allows you to configure the operating procedure for the layer and the like when the [Object] sub tool is used.

(1) Operation of transparent part

Configures the operation when a transparent area (area where nothing is drawn) is clicked or dragged.

Select layer

Clicking a transparent area of the selected layer selects objects on other layers with drawings at the clicked point.

Select multiple by drag

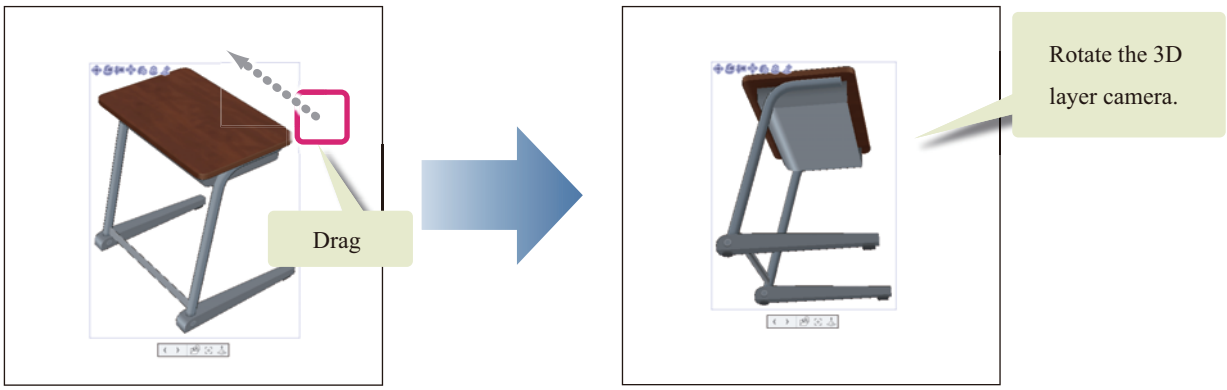
Dragging a transparent area when a [Vector] layer, [Balloon] layer or the like is selected, selects all objects on the edited layer that are inside the dragged area. However, you will not be able to select objects if [Select control point by drag] is turned on.

Select control point by drag

Dragging a transparent area when a [Vector] layer, [Balloon] layer or the like is selected, selects control points on the edited layer that are inside the dragged area. However, you will not be able to select control points if [Select multiple by drag] is turned on.

Rotate 3D camera

Dragging a transparent area when a 3D layer is selected rotates the 3D layer camera.



Set direction of parallel line ruler

Dragging when the parallel line ruler is displayed changes the direction of the parallel line ruler in the dragged direction.

Move even transparent if within border

Dragging a transparent area inside the handles when an object is selected moves the object.

(2) Selectable object

Configures the types of layers and objects that can be selected by clicking. The layers and objects that can be configured are as follows:

- Raster
- Vector
- Image material
- 3D
- Text
- Balloon
- Frame border
- Gradient
- Fill
- Ruler
- Saturated line/Stream line

(3) Add selection

Configures the operation when another object or control point is selected when there are already selected objects or control points.

Select new	Cancels the current selection to select new objects or control points.
Select additionally	Adds new objects or control points to the current selection.
Deselect partially	Removes newly selected objects or control points from the current selection.

B. Camera

Configures the camera angle and the like for 3D item materials.

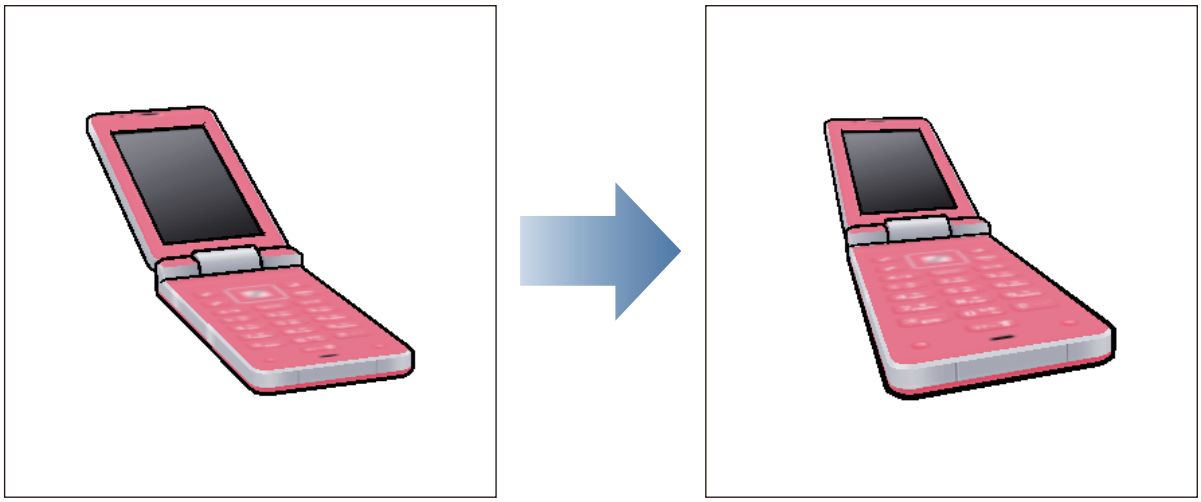
Memo **Settings in this category affect all 3D materials included in the selected 3D layer.**

(1) Camera

Clicking [Angle preset] displays a list of camera angles. Select the desired camera angle to apply to the selected 3D item material.

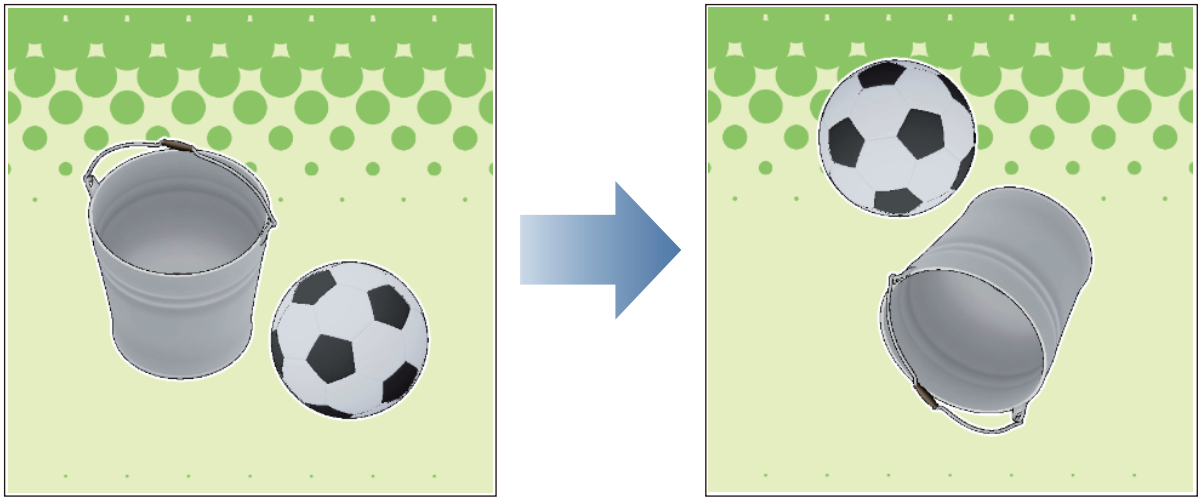
(2) Perspective

Adds perspective to the 3D item material.



(3) Roll

Rotates the camera with its position fixed.



(4) Focus on editing target

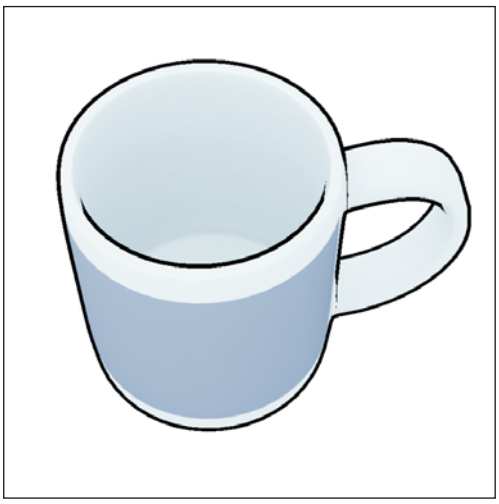
Moves the camera in such a way that the selected 3D item material is displayed in the center.

C. Light Source

Allows you to configure light source to the selected 3D item material.

(1) Light source

Allows you to expose a 3D item material to the light source when turned on.



Light source : OFF

Light source : ON

(2) Orientation of light source

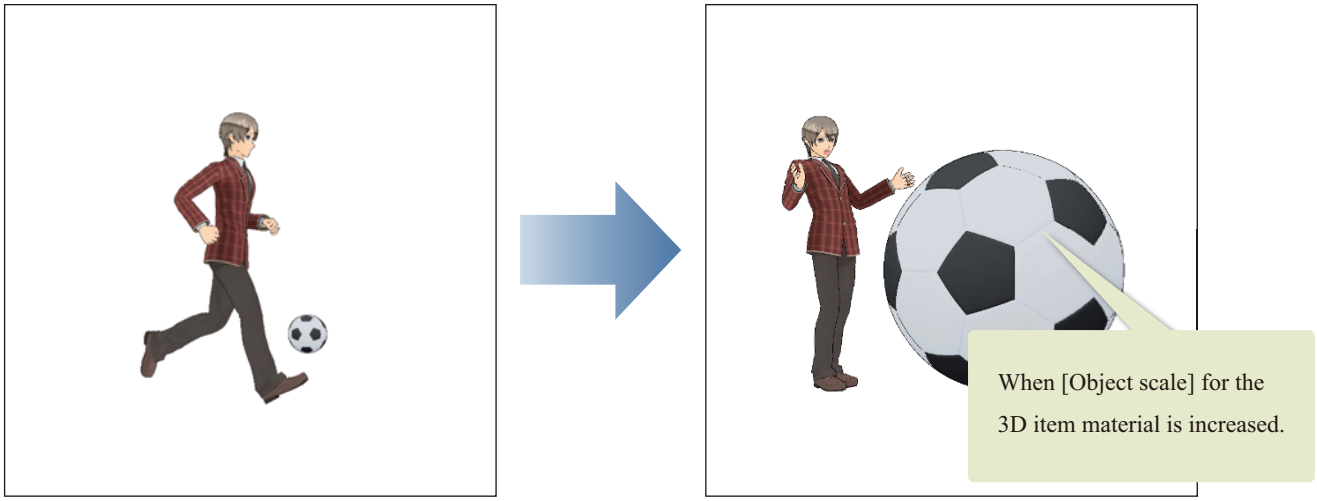
Allows you to configure the orientation of the light source by dragging a circle.

D. Allocate

Configures the position of the 3D item material.

(1) Object scale

Scales up/down the selected 3D material. Moving the slider to the right scales up the 3D material.



(2) Ground

Grounds the 3D character material to the base (floor) of the 3D space.

Memo

Base of the 3D space means the grid displayed when a 3D material is clicked. It is equivalent to the floor of the 3D space.

(3) Position

Moves the 3D item material.

X	Moves the 3D item material horizontally.
Y	Moves the 3D item material vertically.
Z	Moves the 3D item material back and forth.

(4) Whole rotation

Rotates the 3D item material.

X	Rotates the 3D item material about the X-axis.
Y	Rotates the 3D item material about the Y-axis.
Z	Rotates the 3D item material about the Z-axis.

(5) Partial rotation

Rotates the selected part of the 3D item material.

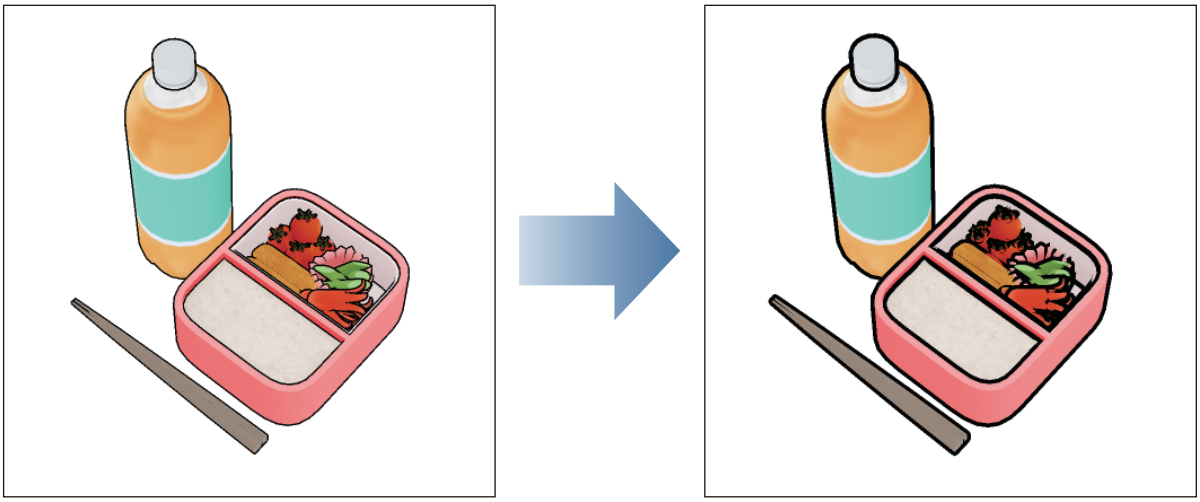
X	Rotates the 3D item material about the X-axis.
Y	Rotates the 3D item material about the Y-axis.
Z	Rotates the 3D item material about the Z-axis.

E. Outline

Configures the outline for the 3D item material.

(1) Outline width

Configures the outline for the 3D item material. Moving the slider to the right thickens the outline.



(2) Opacity

Configures the opacity of the outline. The larger the value, the higher will be the opacity of the outline.

(3) Color

Configures the drawing color of the outline. Clicking the item displays the dialog box for selecting a color.

F. Preference

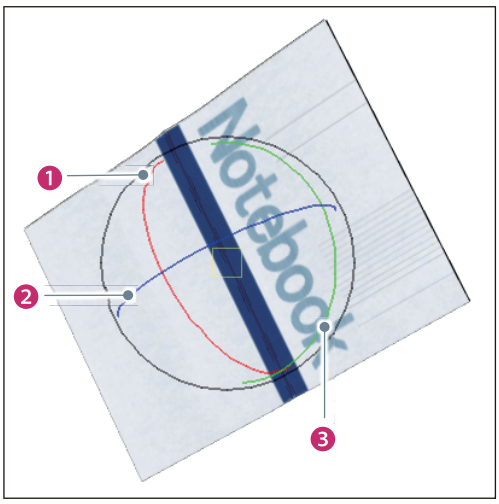
Configures the operation mode, display method and the like for 3D item materials.

Memo **Settings in this category affect all 3D materials included in the selected 3D layer.**

(1) Manipulator

When turned on, displays a [Manipulator] for the selected 3D item material. Dragging the [Manipulator] allows you to rotate the 3D item material.

Aligning the mouse cursor with each ring and dragging allows you to rotate the 3D item material in the direction of the ring.



(1) Rotate (Red)	Drag along the [Red] ring. Rotates the 3D item material in the direction of the ring.
(2) Rotate (Blue)	Drag along the [Blue] ring. Rotates the 3D item material in the direction of the ring.
(3) Rotate (Green)	Drag along the [Green] ring. Rotates the 3D item material in the direction of the ring.

Sub tool detail Palette (When a 3D Character Material or 3D Drawing Doll Is Selected)

When a 3D character material is selected using [Object] of the [Operation] tool, the [Tool property] palette and [Sub tool detail] palette can be used to configure settings related to the facial expression and pose of the 3D item material. Settings related to the pose of the 3D drawing doll and 3D pose model material can also be configured in a similar way.

Operating Procedure

To change the facial expression and hair style of the 3D character material using the [Tool property] palette, proceed as follows.

1 Select the 3D material

Click the 3D character material to edit.

2 Configure on the tool property palette

On the [Tool property] palette, configure the facial expression and hair style.

(1) Click [Face part]. Select a face part from the list that displays.

(2) Click [Hair]. Select a hair style from the list that displays.

Memo

Displaying the [Sub tool detail] palette from [Sub tool detail] on the [Tool property] palette will allow you to configure in more detail. For details on settings on the [Tool property] palette and [Sub tool detail] palette, see "Sub tool detail Palette Settings (When a 3D Character Material or 3D Drawing Doll Is Selected)" .

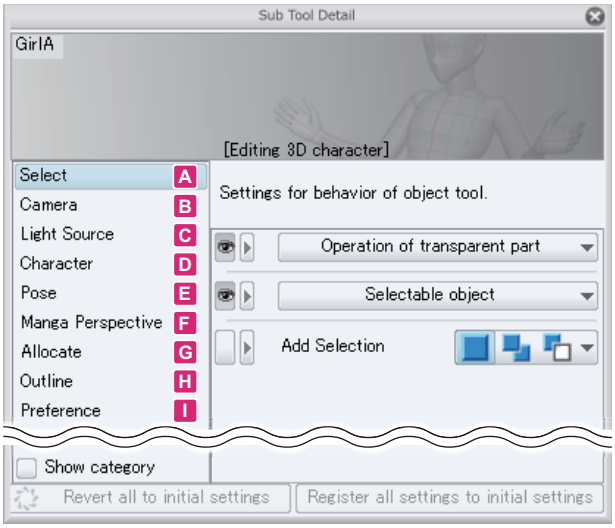
3 The settings are reflected

The settings are reflected in the 3D character material on the canvas.

Sub tool detail Palette Settings (When a 3D Character Material or 3D Drawing Doll Is Selected)

When a 3D character material or 3D drawing doll is selected using [Object] of the [Operation] tool, the following settings are available on the [Sub tool detail] palette. Click each category to change the settings displayed on the palette. The following describes the settings taking a 3D character material as an example.

Important **When a 3D drawing doll or 3D pose model material is selected, some of the settings become unavailable.**



Memo

Categories can be displayed on the [Tool property] palette. Displaying categories is recommended if you want to check the settings on the [Tool property] palette. The method to show categories is as follows.

- **Turn on [Show category] on the [Sub tool detail] palette**
- **Open the menu of the [Tool property] palette and turn on [Show category]**

A. Select

Allows you to configure the operating procedure for the layer and the like when the [Object] sub tool is used.

(1) Operation of transparent part

Configures the operation when a transparent area (area where nothing is drawn) is clicked or dragged.

Select layer

Clicking a transparent area of the selected layer selects objects on other layers with drawings at the clicked point.

Select multiple by drag

Dragging a transparent area when a [Vector] layer, [Balloon] layer or the like is selected, selects all objects on the edited layer that are inside the dragged area. However, you will not be able to select objects if [Select control point by drag] is turned on.

Select control point by drag

Dragging a transparent area when a [Vector] layer, [Balloon] layer or the like is selected, selects control points on the edited layer that are inside the dragged area. However, you will not be able to select control points if [Select multiple by drag] is turned on.

Rotate 3D camera

Dragging a transparent area when a 3D layer is selected rotates the 3D layer camera.

Set direction of parallel line ruler

Dragging when the parallel line ruler is displayed changes the direction of the parallel line ruler in the dragged direction.

Move even transparent if within border

Dragging a transparent area inside the handles when an object is selected moves the object.

(2) Selectable object

Configures the types of layers and objects that can be selected by clicking. The layers and objects that can be configured are as follows:

- Raster
- Vector
- Image material
- 3D
- Text
- Balloon
- Frame border
- Gradient
- Fill
- Ruler
- Saturated line/Stream line

(3) Add selection

Configures the operation when another object or control point is selected when there are already selected objects or control points.

Select new	Cancels the current selection to select new objects or control points.
Select additionally	Adds new objects or control points to the current selection.
Deselect partially	Removes newly selected objects or control points from the current selection.

B. Camera

Configures the camera angle and the like for 3D character materials.

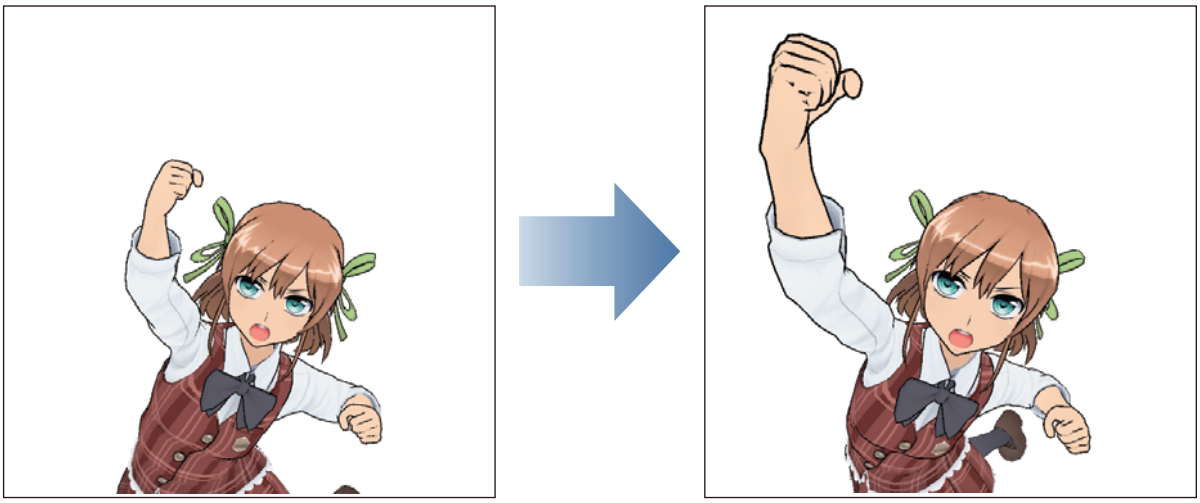
Memo **Settings in this category affect all 3D materials included in the selected 3D layer.**

(1) Camera

Clicking [Angle preset] displays a list of camera angles. Select the desired camera angle to apply to the selected 3D item material.

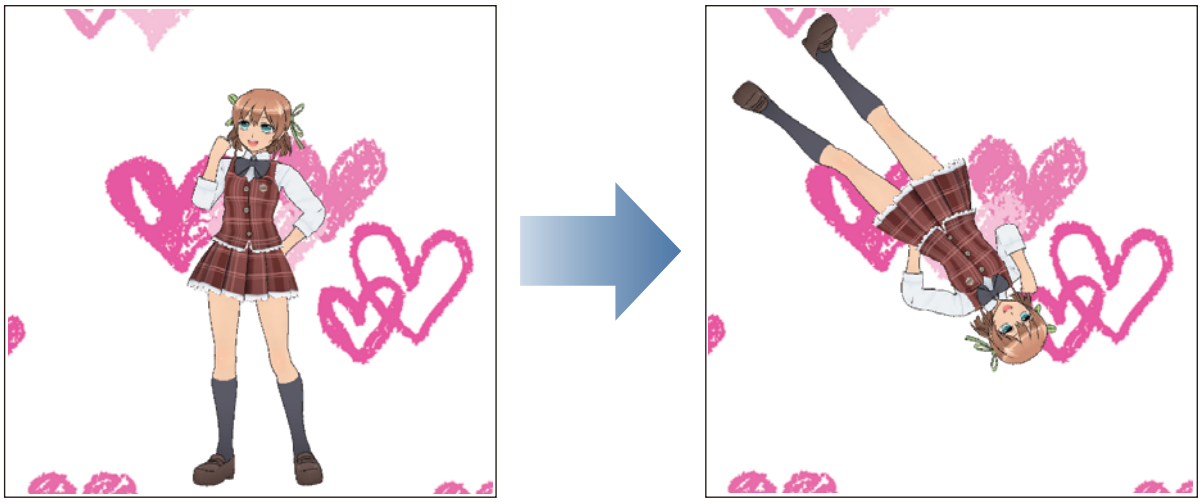
(2) Perspective

Adds perspective to the 3D character material.



(3) Roll

Rotates the camera with its position fixed.

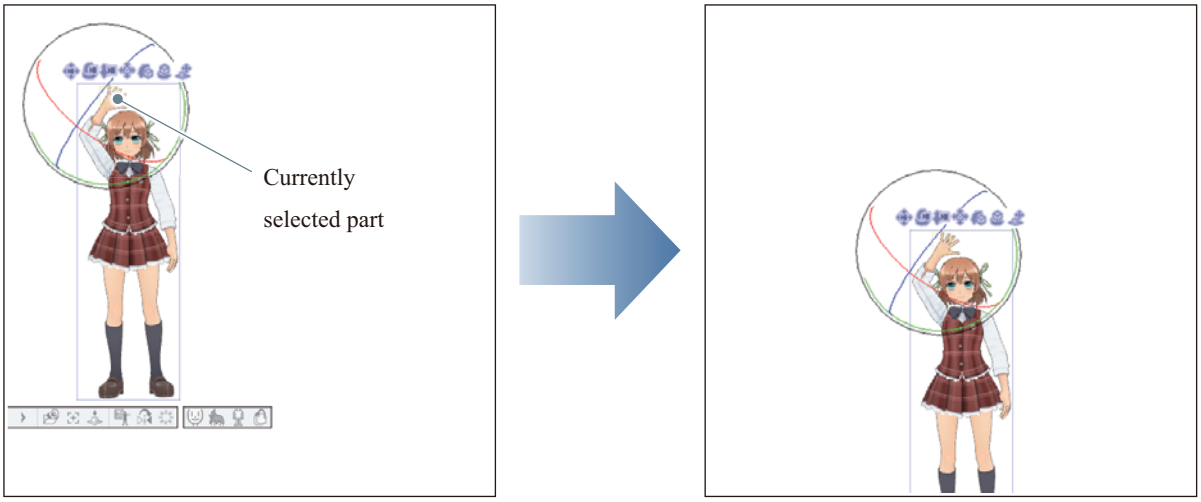


(4) Focus on editing target

Moves the camera in such a way that the selected 3D character material is displayed in the center.

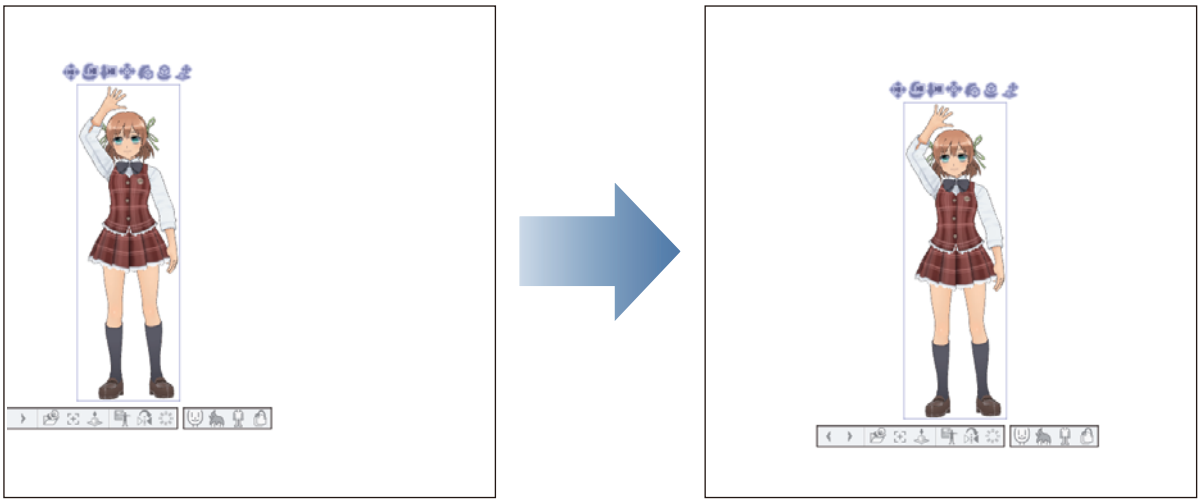
When a part is selected

Moves the camera in such a way that the selected part is displayed in the center.



When a part is not selected

Moves the camera in such a way that the selected 3D character material is displayed in the center.



C. Light Source

Allows you to configure light source to the selected 3D character material.

(1) Light source

Allows you to expose a 3D character material to the light source when turned on.

Light source : OFF

Light source : ON

(2) Orientation of light source

Allows you to configure the orientation of the light source by dragging a circle.

D. Character

Configures the facial expression, clothes, hair style and the like for the selected 3D character material.

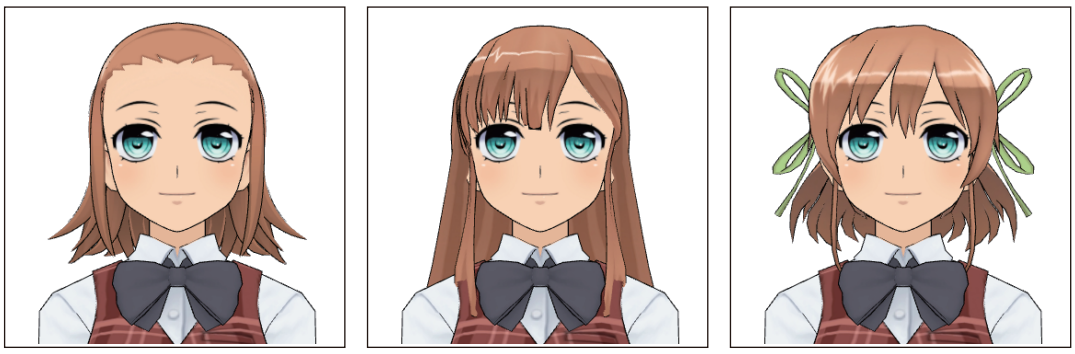
Important **The [Character] category does not display when a 3D drawing doll or 3D pose model material is selected.**

(1) Face part

Select a face part for the 3D character material from the list.

(2) Hair

Select a hair style for the 3D character material from preconfigured hair styles.

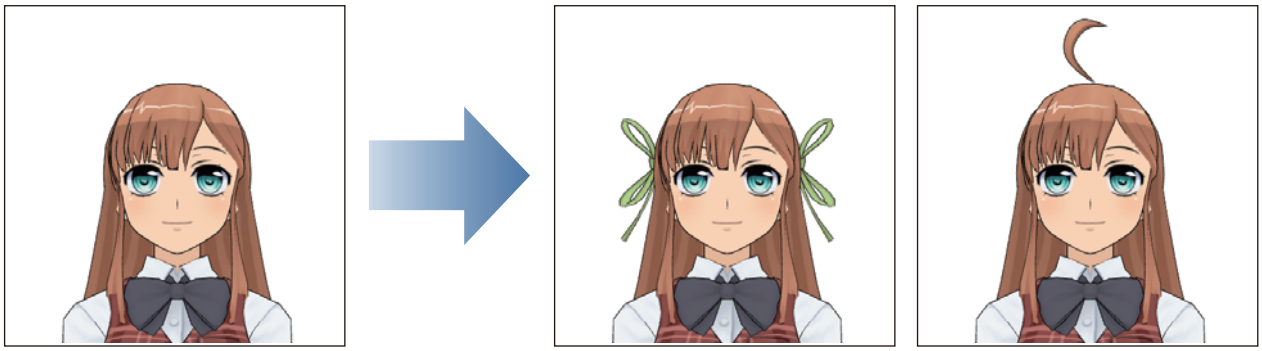


(3) Body

Select a body for the 3D character material from preconfigured bodies. Changing the body allows you to change the 3D character material's clothes.

(4) Accessories

Select the desired accessory(accessories) for the selected 3D character material to wear, such as a ribbon. You may select multiple items for Accessories.



(5) Setting of expression

Click to display a list of facial expressions for 3D character materials. Select the desired facial expression for the selected 3D character material.

(6) Expression in eye

Click to change the eye expression.

Memo **[Expression in eye] is available when eye expressions are configured in CLIP STUDIO COORDINATE.**

(7) Expression in mouth

Click to change the mouth expression.

Memo **[Expression in mouth] is available when mouth expressions are configured in CLIP STUDIO COORDINATE.**

E. Pose

Configures the pose of the selected 3D character material.

(1) Initial pose

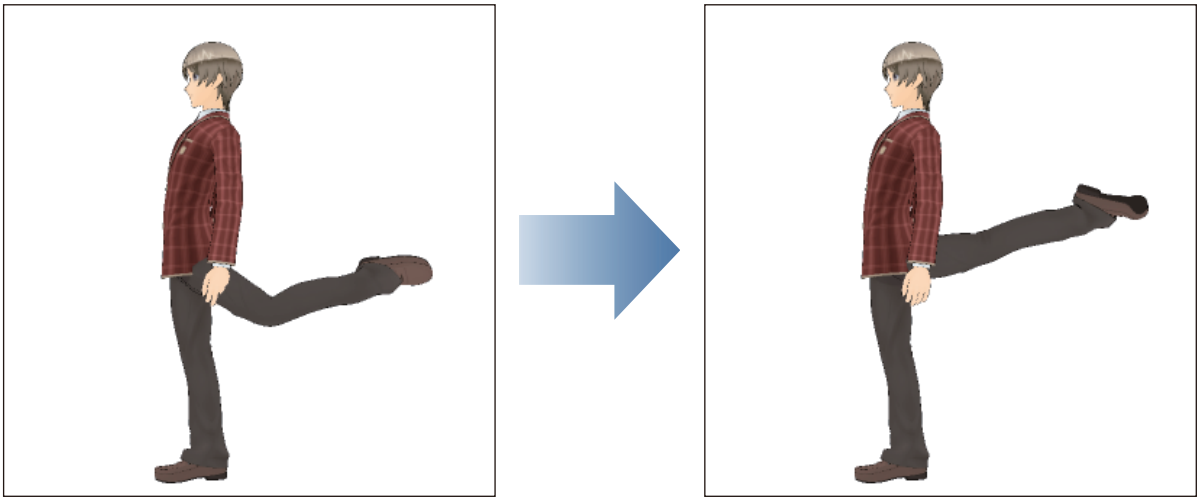
When clicked, resets the pose settings to the initial pose.

(2) Flip horizontal

When clicked, horizontally reverses the pose of the 3D character material.

(3) Joint angle limit

When turned on, the bending angle of [Bones] are restricted in a similar way as human joints. When turned off, [Bones] can bend in any direction.



[Joint angle limit]: ON

[Joint angle limit]: OFF

(4) Hand setup

Allows you to assign poses to the hands. For the functions of each part of [Hand setup], see "Hand Setup Items" .

F. Manga Perspective

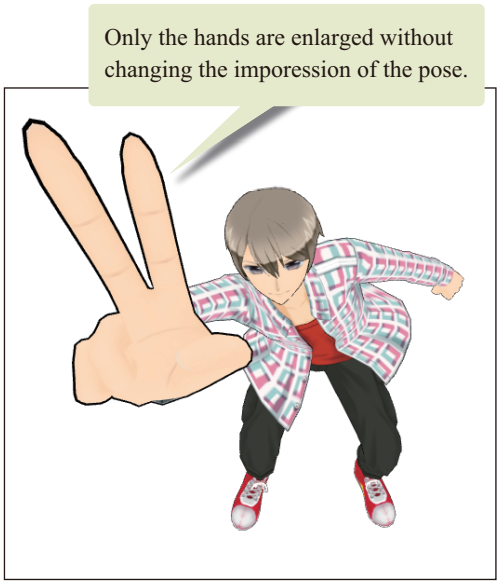
Allows you to configure a manga-like perspective with the depth emphasized when editing a 3D character or 3D drawing doll.

*The "Manga perspective "function has been developed based on technologies devised from "Research and Development of Ultra-realistic Communication Technologies with Evolutionary 3D Imaging Technologies", a consigned research by the National Institute of Information and Communications Technology (NICT), an independent organization, in cooperation with Naemura Laboratory at Tokyo University and HITACHI.

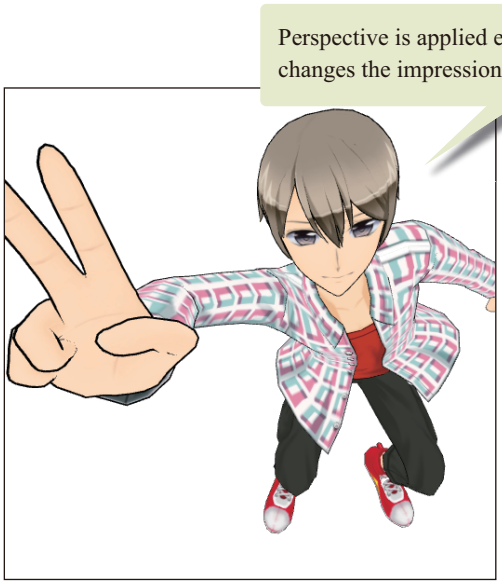
Important **The [Manga perspective] category does not display when a 3D pose model material is selected.**

(1) Manga perspective

Allows you to configure a manga-like perspective with the depth emphasized for a 3D character material or 3D drawing doll. Different from [Perspective] of the [Camera] category, you can emphasize the expression of the depth without changing the impression of the pose.



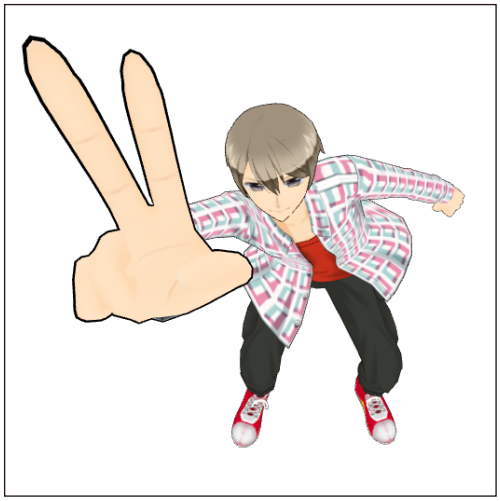
Manga Perspective



Perspective

When this item is turned on, you can adjust the strength of the effect of manga perspective by slider. The larger the value, the stronger will be the effect.

Manga Perspective: OFF

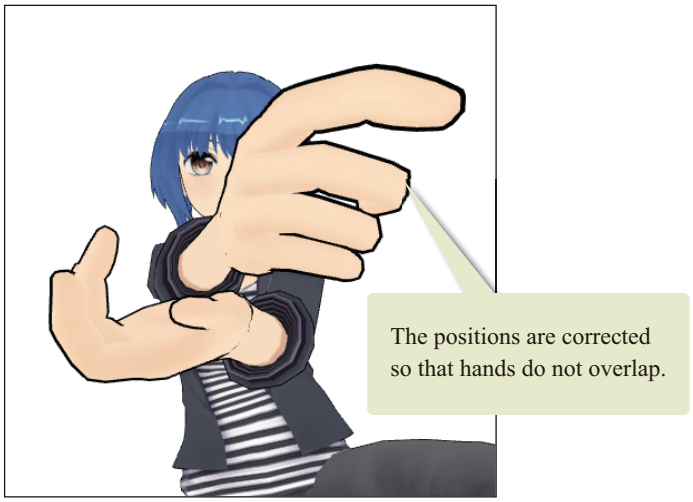


Manga Perspective: ON

(2) Collision correction

Turning this on corrects the collision of parts so that they do not overlap when [Manga perspective] is turned on.

Collision Correction: OFF



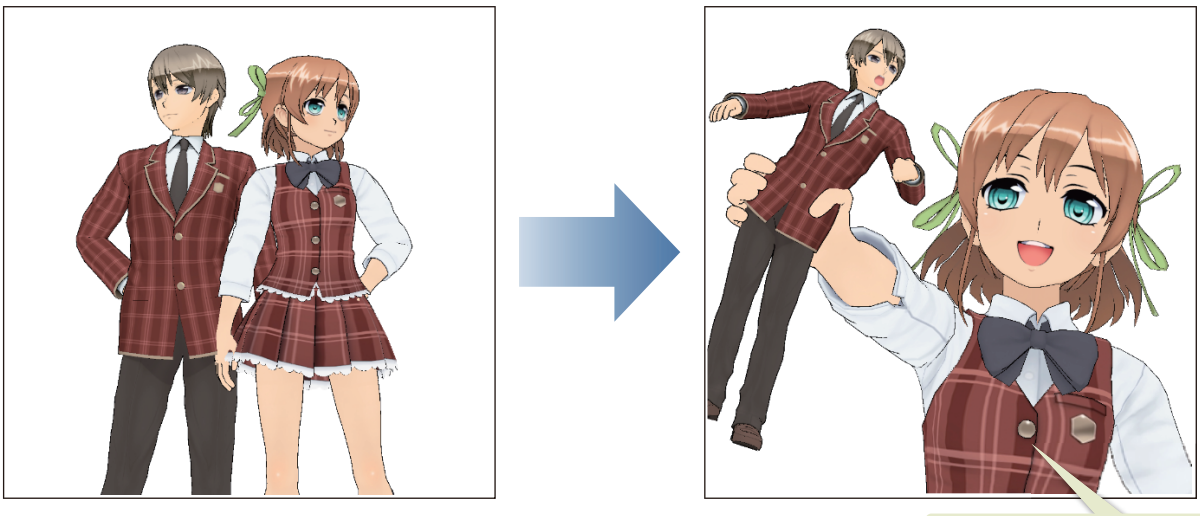
Collision Correction: ON

G. Allocate

Configures the position of the 3D character material.

(1) Object scale

Scales up/down the selected 3D character material. Moving the slider to the right scales up the 3D character material.



When [Object scale] for the 3D character material is increased.

(2) Ground

Grounds the 3D character material to the base (floor) of the 3D space.

Memo

Base of the 3D space means the grid displayed when a 3D material is clicked. It is equivalent to the floor of the 3D space.

(3) Position

Moves the 3D character material.

X	Moves the 3D character material horizontally.
Y	Moves the 3D character material vertically.
Z	Moves the 3D character material back and forth.

(4) Whole rotation

Rotates the 3D character material.

X	Rotates the 3D character material about the X-axis.
Y	Rotates the 3D character material about the Y-axis.
Z	Rotates the 3D character material about the Z-axis.

(5) Partial rotation

Rotates the selected part of the 3D character material.

X	Rotates the selection about the X-axis.
Y	Rotates the selection about the Y-axis.
Z	Rotates the selection about the Z-axis.

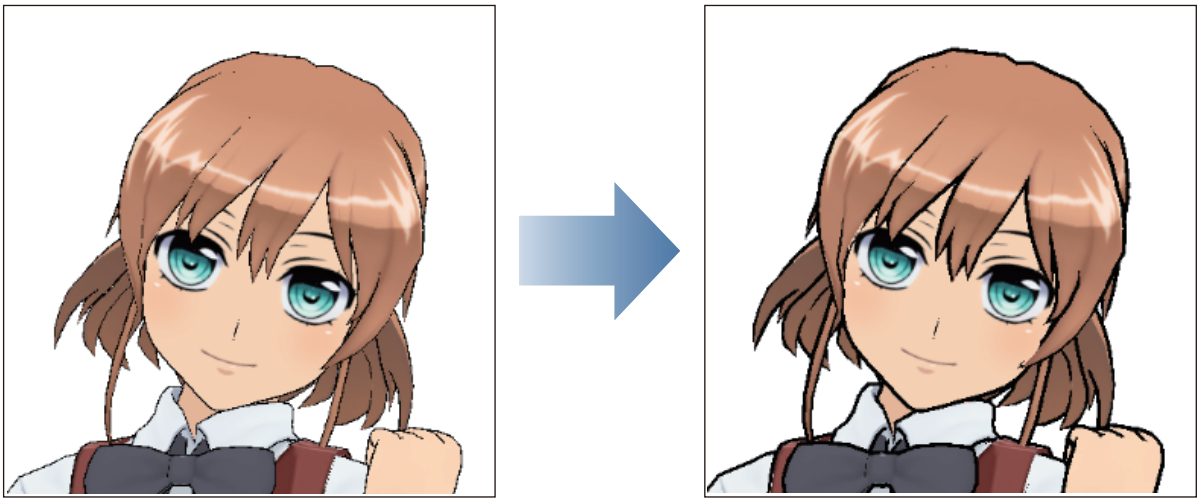
Memo **If [Joint angle limit] is turned on for [Pose] on the [Sub tool detail] palette, the rotation of a part may be limited.**

H. Outline

Configures the outline of the 3D character material.

(1) Outline width

Configures the outline for the 3D item material. The larger the value, the thicker will be the outline.



(2) Opacity

Configures the opacity of the outline. The larger the value, the higher will be the opacity of the outline.

(3) Color

Configures the drawing color of the outline. Clicking the color indicator displays the dialog box for selecting a color.

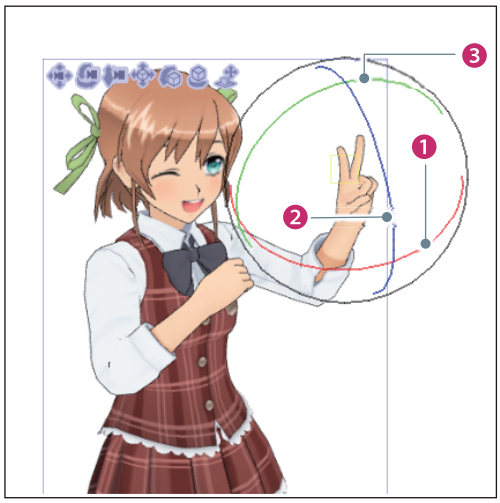
I. Preference

Configures the operation mode, display method and the like for 3D character materials.

(1) Manipulator

When turned on, displays a [Manipulator] for the selected part of the 3D character material. Dragging the [Manipulator] allows you to create a pose for the 3D character material.

Aligning the mouse cursor with each ring and dragging it allows you to rotate the selected part in the direction of the ring.



(1) Twisted rotation	Drag along the [Red] ring. Rotates the selected part in the direction of the ring.
(2) Bending rotation (Blue)	Drag along the [Blue] ring. Rotates the selected part in the direction of the ring.
(3) Bending rotation (Green)	Drag along the [Green] ring. Rotates the selected part in the direction of the ring.

Memo

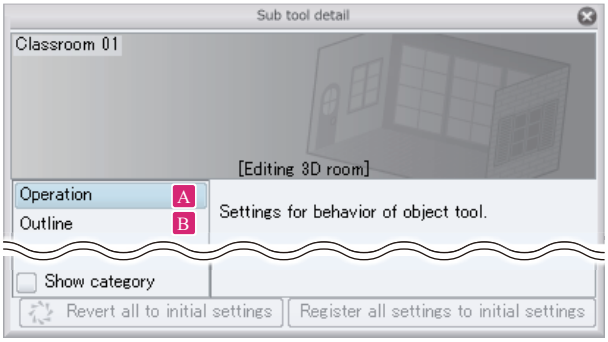
[Twisted rotation], [Bending rotation (Blue)] and [Bending rotation (Green)] are displayed only when rotation is possible in the relevant direction.

Sub tool detail Palette (When a 3D Background Material Is Selected)

When a 3D background material is selected using [Object] of the [Operation] tool, the [Tool property] palette and [Sub tool detail] palette can be used to configure the outline of the 3D background material.

Sub tool detail Palette Settings (When a 3D Background Material Is Selected)

When a 3D background material is selected using [Object] of the [Operation] tool, the following settings are available on the [Sub tool detail] palette. Click each category to change the settings displayed on the palette.



Memo

Categories can be displayed on the [Tool property] palette. Displaying categories is recommended if you want to check the settings on the [Tool property] palette. The method to show categories is as follows.

- **Turn on [Show category] on the [Sub tool detail] palette**
- **Open the menu of the [Tool property] palette and turn on [Show category].**

A. Select

Allows you to configure the operating procedure for the layer and the like when the [Object] sub tool is used.

(1) Operation of transparent part

Configures the operation when a transparent area (area where nothing is drawn) is clicked or dragged.

Select layer

Clicking a transparent area of the selected layer selects objects on other layers with drawings at the clicked point.

Select multiple by drag

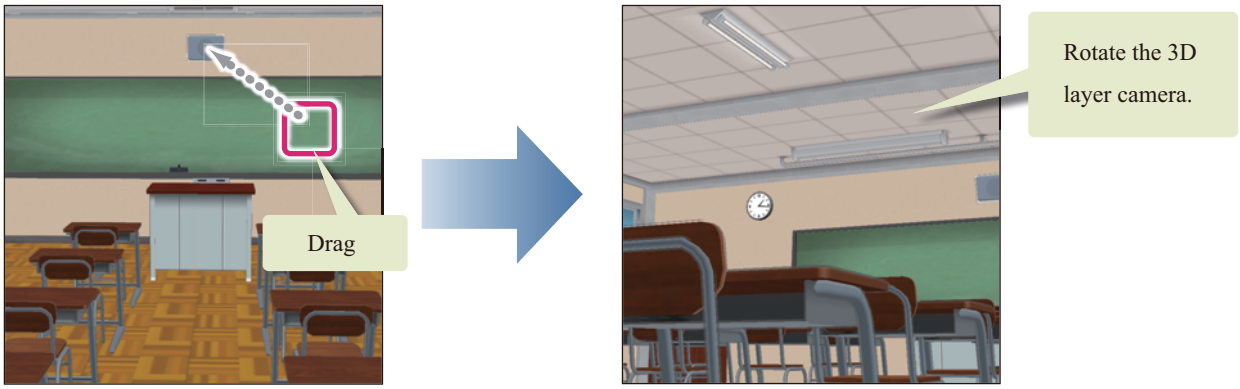
Dragging a transparent area when a [Vector] layer, [Balloon] layer or the like is selected, selects all objects on the edited layer that are inside the dragged area. However, you will not be able to select objects if [Select control point by drag] is turned on.

Select control point by drag

Dragging a transparent area when a [Vector] layer, [Balloon] layer or the like is selected, selects control points on the edited layer that are inside the dragged area. However, you will not be able to select control points if [Select multiple by drag] is turned on.

Rotate 3D camera

Dragging a transparent area when a 3D layer is selected rotates the 3D layer camera.



Set direction of parallel line ruler

Dragging when the parallel line ruler is displayed changes the direction of the parallel line ruler in the dragged direction.

Move even transparent if within border

Dragging a transparent area inside the handles when an object is selected moves the object.

(2) Selectable object

Configures the types of layers and objects that can be selected by clicking. The layers and objects that can be configured are as follows:

- Raster
- Vector
- Image material
- 3D
- Text
- Balloon
- Frame border
- Gradient
- Fill
- Ruler
- Saturated line/Stream line

(3) Add selection

Configures the operation when another object or control point is selected when there are already selected objects or control points.

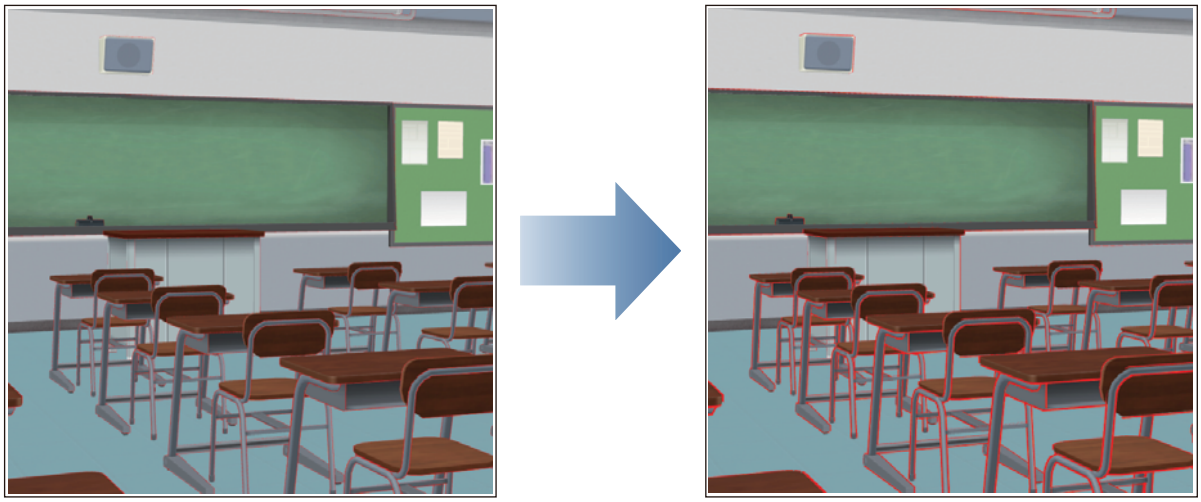
Select new	Cancels the current selection to select new objects or control points.
Select additionally	Adds new objects or control points to the current selection.
Deselect partially	Removes newly selected objects or control points from the current selection.

B. Outline

Configures the outline of the 3D background material.

(1) Outline width

Configures the outline for the 3D item material. The larger the value, the thicker will be the outline. In the figure below, [Red] is configured for the outline.



(2) Opacity

Configures the opacity of the outline. The larger the value, the higher will be the opacity of the outline.

(3) Color

Configures the drawing color of the outline. Clicking the color indicator displays the dialog box for selecting a color.

Layer property palette

The [Layer property] palette allows you to add an edge to the 3D materials included in the 3D layer. Furthermore, you can adjust the thickness and color of the edges.

Important **You cannot add edges to 3D background materials.**

Operating Procedure

To configure the 3D layer using the [Layer property] palette, proceed as follows.

1 Select the layer

On the [Layer] palette, select the 3D layer to edit.

2 Configure the Layer property palette

Configure the [Layer property] palette.

(1) Turn on [Edge].

(2) Configure the thickness of the edges with the [Thickness of edges] slider.

(3) Click [▼] by [Edge color] to select a color for the edges from the dialog box for selecting a color.

Memo **For details on settings on the [Layer property] palette, see "Functions of Layer property Palette" .**

3 The settings are reflected

The settings are reflected in the canvas.

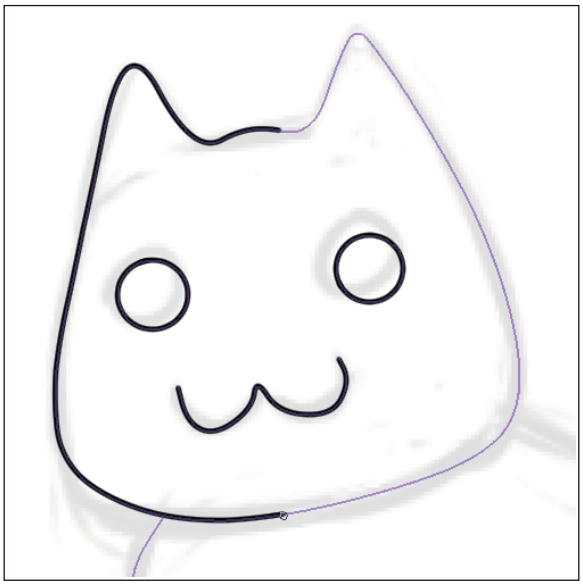
Explanation: Ruler

The chapter describes how to create, edit and delete rulers.

What Is a Ruler?

A tool group to [Create ruler] is provided in the sub tools of the [Figure] tool.

Rulers are created for a layer being edited. You can snap drawings on a [Raster] layer or [Vector] layer to a created ruler.

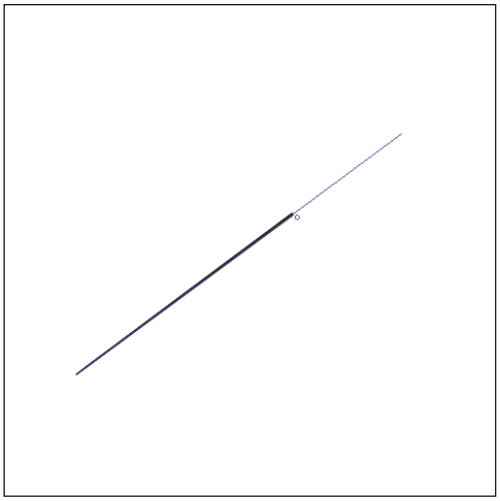


Types of Rulers

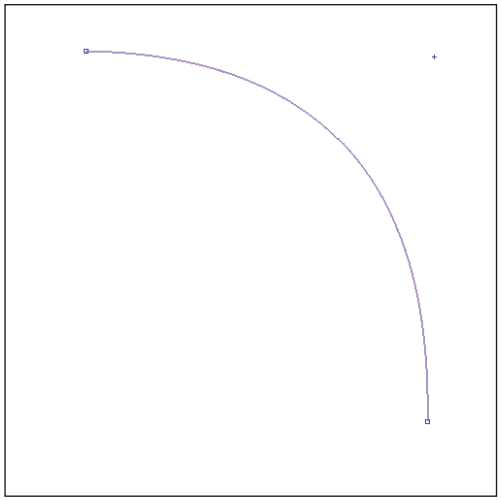
The following rulers are provided in the sub tools of the [Figure] tool.

Lliner ruler

Creates a single straight line or curved line (Quadratic Bezier, Cubic Bezier) ruler.



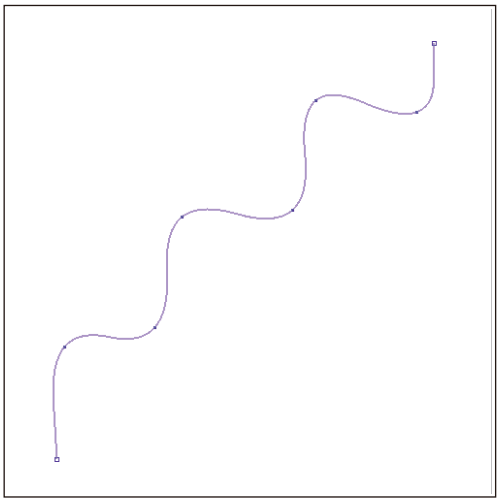
Linear ruler (Straight line)



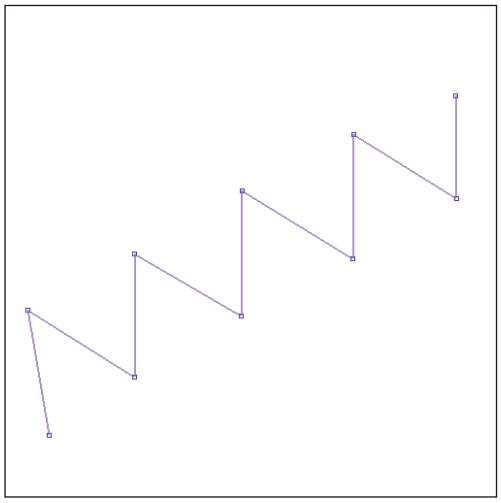
Linear ruler (Quadratic Bezier)

Curve ruler

Creates a straight line or curved line (Quadratic Bezier, Cubic Bezier) ruler connecting multiple points.



Curve ruler (Spline)



Curve ruler (Straight line)

Figure ruler

Creates figure rulers such as rectangles and ellipses.

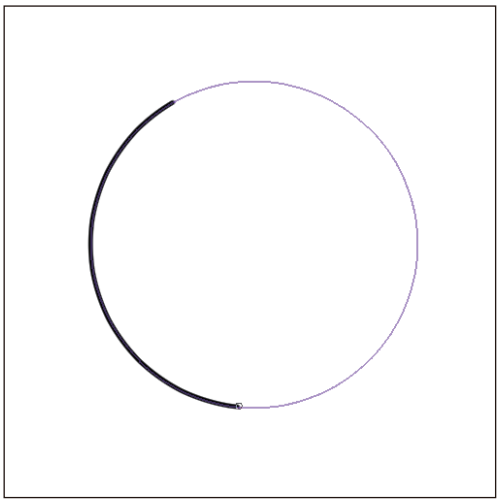


Figure ruler (Ellipse)

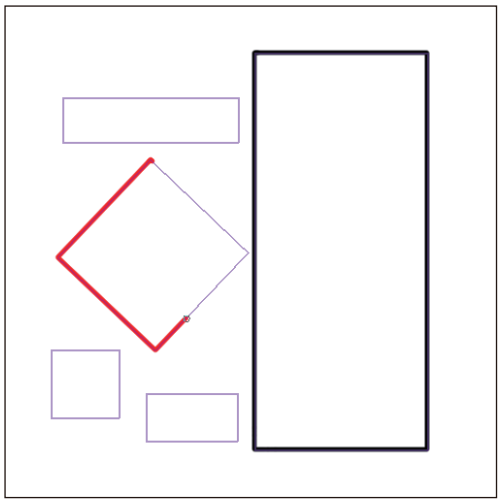
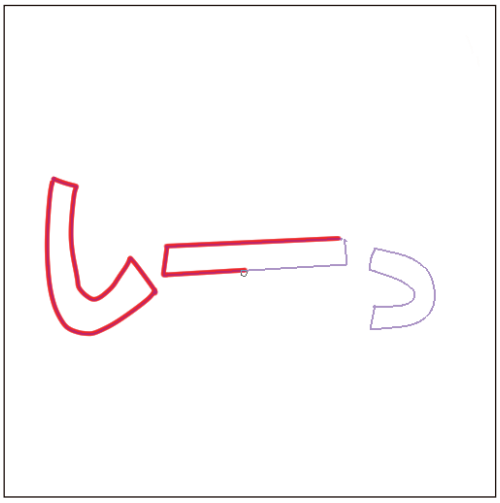


Figure ruler (Rectangle)

Ruler pen

Creates a ruler in the shape of a pen drawing.



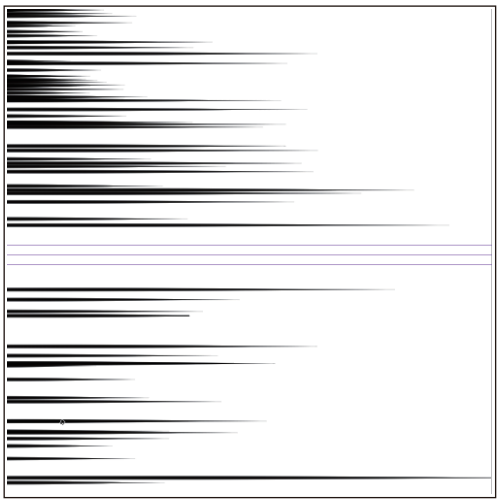
Ruler pen

Special ruler

Creates a ruler for drawing special effects.

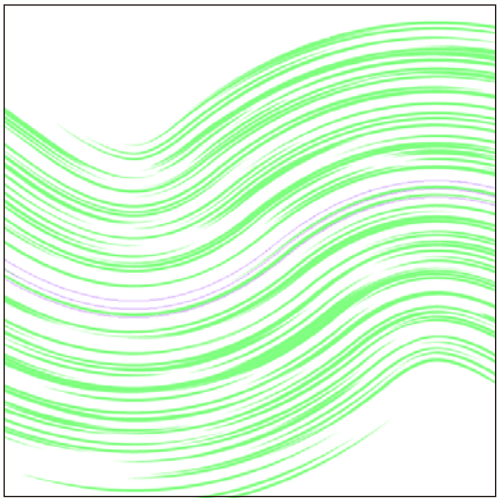
Select the ruler type from [Parallel line], [Parallel curve], [Multiple curve], [Focus line], [Focus curve], [Concentric circle] and [Guide].

Parallel line



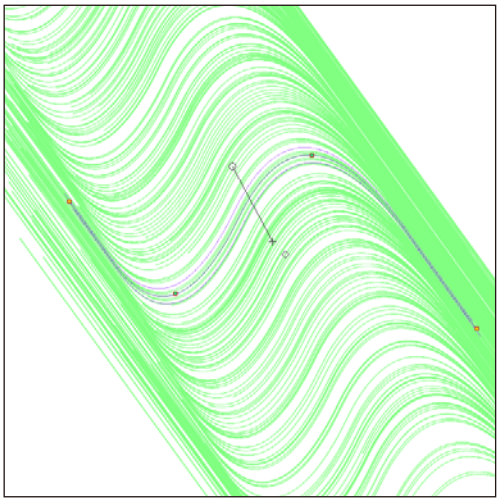
Special ruler (Parallel line)

Parallel curve



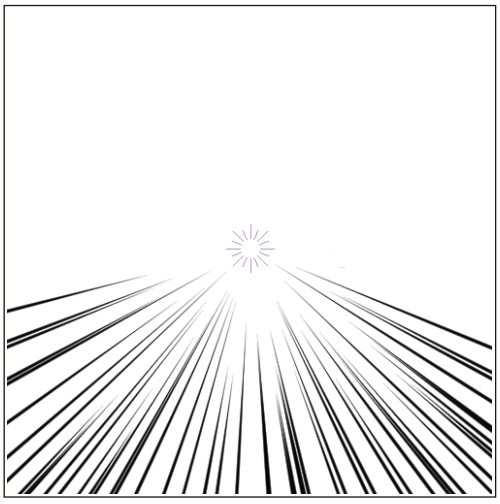
Specify ruler (Parallel curve)

Multiple curve



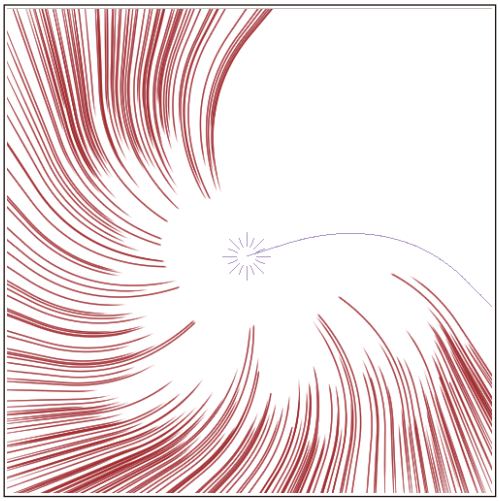
Specify ruler (Multiple curve)

Focus line



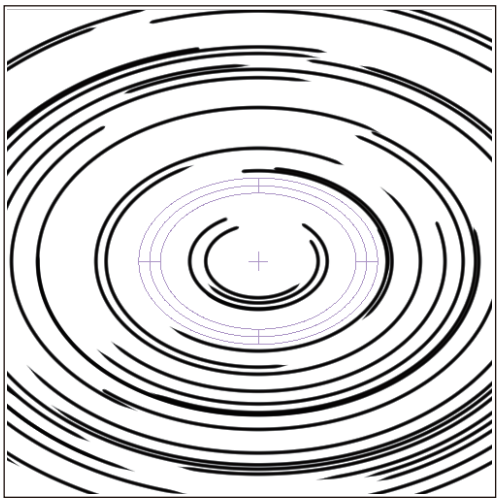
Special ruler (Focus line)

Focus curve



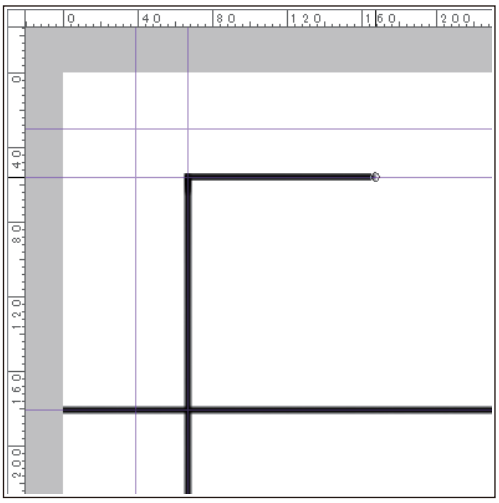
Special ruler (Focus curve)

Concentric circle



Special ruler (Concentric circle)

Guide



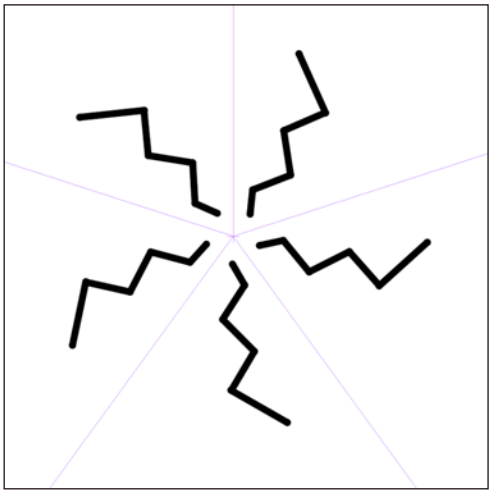
Special ruler (Guide)

Memo

Dragging the [Ruler] in the canvas direction allows you to create a [Guide]. Furthermore, dragging the [Guide] outside of the canvas with the [Object] sub tool allows you to delete it.

Symmetrical ruler

This ruler is used for drawing bilaterally symmetric objects, geometric designs, etc. You can draw in symmetrical positions with the ruler as the axis.



Symmetrical ruler: Number of lines 5

Creating a Ruler

This section describes how to create a ruler for each type of ruler.

Lliner ruler

To create a [Lliner ruler], proceed as follows.

1 Select the layer

On the [Layer] palette, select the layer where to create the ruler.

2 Select the tool

On the [Tool] palette, select the [Figure] tool.

3 Select the sub tool

On the [Sub tool] palette, select [Ruler].

(1) Click the [Create ruler] icon.

(2) Select [Straight line ruler].

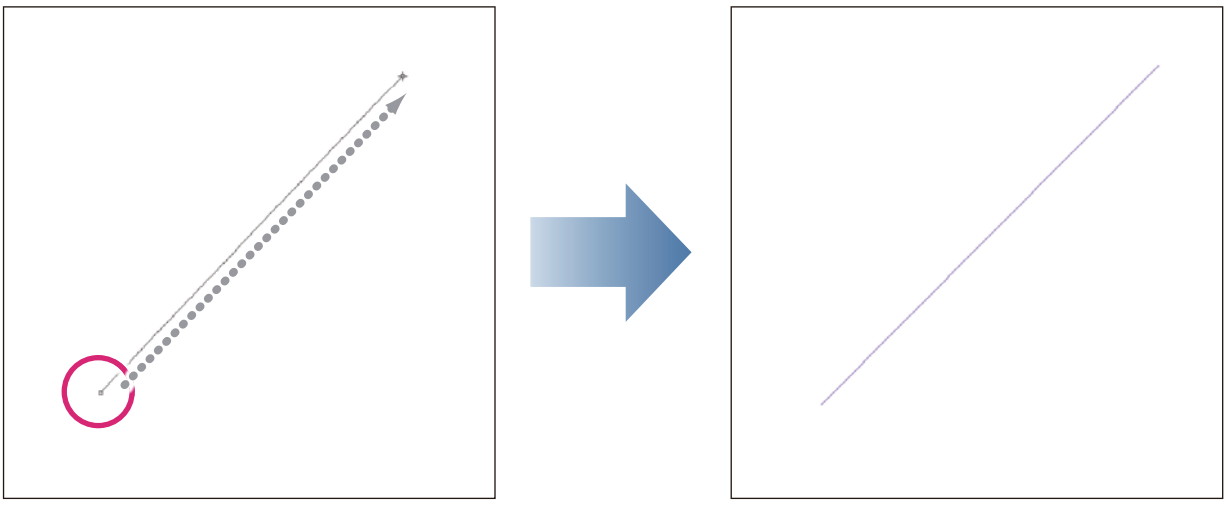
Memo

You can configure the ruler destination in [Create at editing layer] on the [Tool property] palette.

- **If [Create at editing layer] is turned on, the ruler is created in the layer being edited.**
- **If [Create at editing layer] is turned off, a layer is created at the bottom of the [Layer] palette, and the ruler, created there.**

4 Create the ruler

On the canvas, drag from the starting point to the end point of the ruler. The ruler is created.



Creating a ruler displays a ruler icon on the [Layer] palette.

Curve ruler

To create a [Curve ruler], proceed as follows.

1 Select the layer

On the [Layer] palette, select the layer where to create the ruler.

2 Select the tool

On the [Tool] palette, select the [Figure] tool.

3 Select the sub tool

On the [Sub tool] palette, select [Ruler].

(1) Click the [Create ruler] icon.

(2) Select [Curve ruler].

4 Select the straight line or curved line drawing method

On the [Tool property] palette, select a drawing method from [Curve]. In this example, [Spline] is selected.

Memo

You can configure the ruler destination in [Create at editing layer] on the [Tool property] palette.

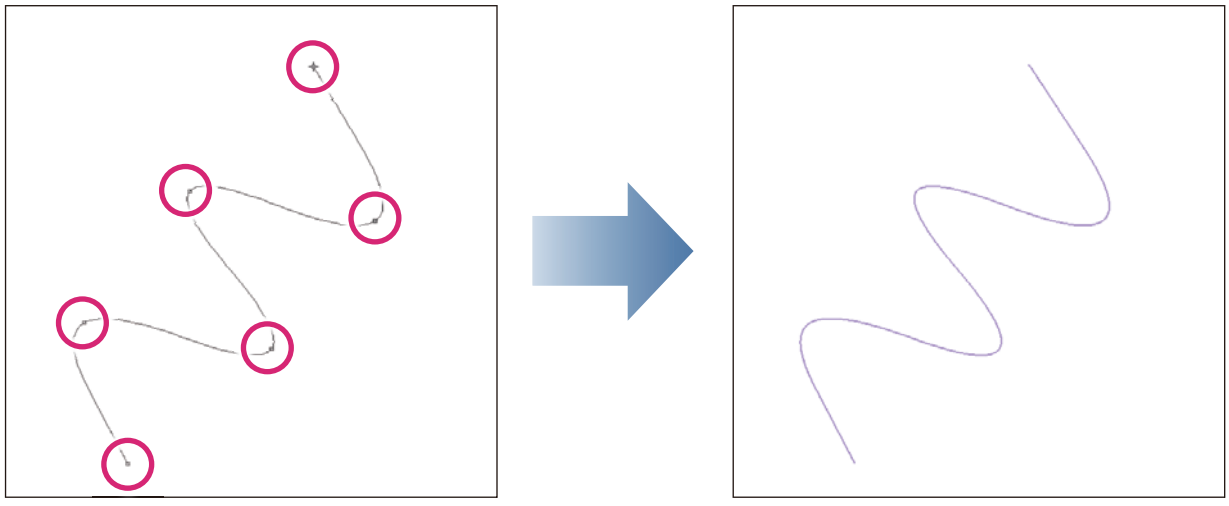
- **If [Create at editing layer] is turned on, the ruler is created in the layer being edited.**
- **If [Create at editing layer] is turned off, a layer is created at the bottom of the [Layer] palette, and the ruler, created there.**

5 Create the ruler

Specify the points that will be connected by the curve. Double clicking commits the drawn line and creates the ruler.

Memo

The drawing method for [Curve ruler] is the same as that for [Continuous curve] of the [Figure] tool. For the drawing method for [Curve rulers] other than [Spline], see "Drawing Continuous Curves" .



Creating a ruler displays a ruler icon on the [Layer] palette.

Figure ruler

To create a [Figure ruler], proceed as follows.

1 Select the layer

On the [Layer] palette, select the layer where to create the ruler.

2 Select the tool

On the [Tool] palette, select the [Figure] tool.

3 Select the sub tool

On the [Sub tool] palette, select [Ruler].

(1) Click the [Create ruler] icon.

(2) Select [Figure ruler].

4 Select the shape

On the [Tool property] palette, select the shape for the ruler from [Figure]. In this example, [Rectangle] is selected.

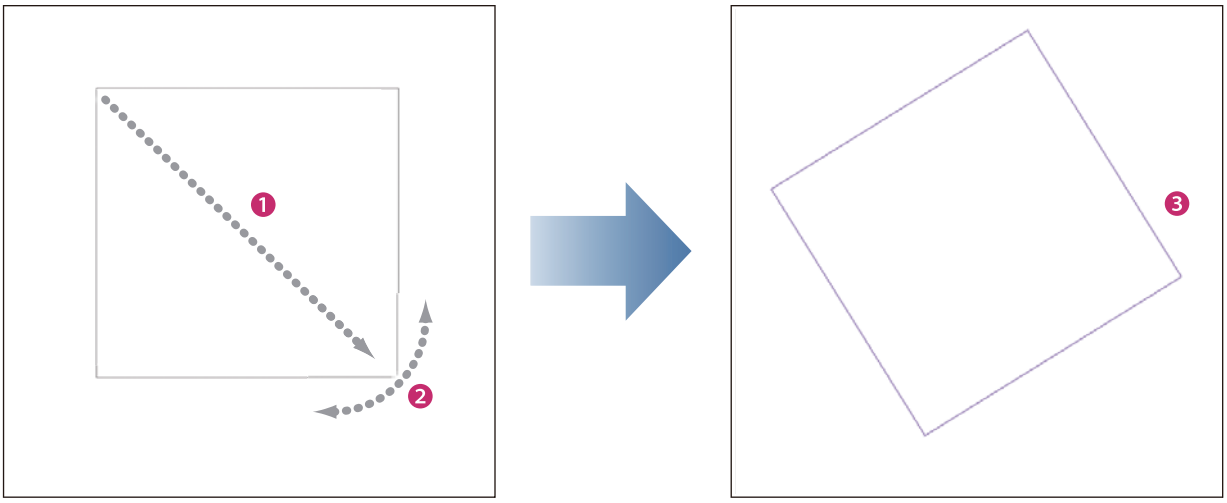
Memo

You can configure the ruler destination in [Create at editing layer] on the [Tool property] palette.

- **If [Create at editing layer] is turned on, the ruler is created in the layer being edited.**
- **If [Create at editing layer] is turned off, a layer is created at the bottom of the [Layer] palette, and the ruler, created there.**

5 Create the ruler

Drag on the canvas to create the ruler.



(1) Drag while pressing the mouse button in the diagonal direction of the shape. Release the mouse button at the end point.

(2) Dragging the canvas rotates the shape, allowing you to adjust its angle.

(3) Clicking the canvas creates the ruler.

Creating a ruler displays a ruler icon on the [Layer] palette.

Ruler pen

To create a [Ruler pen], proceed as follows.

1 Select the layer

On the [Layer] palette, select the layer where to create the ruler.

2 Select the tool

On the [Tool] palette, select the [Figure] tool.

3 Select the sub tool

On the [Sub tool] palette, select [Ruler].

(1) Click the [Create ruler] icon.

(2) Select [Ruler pen].

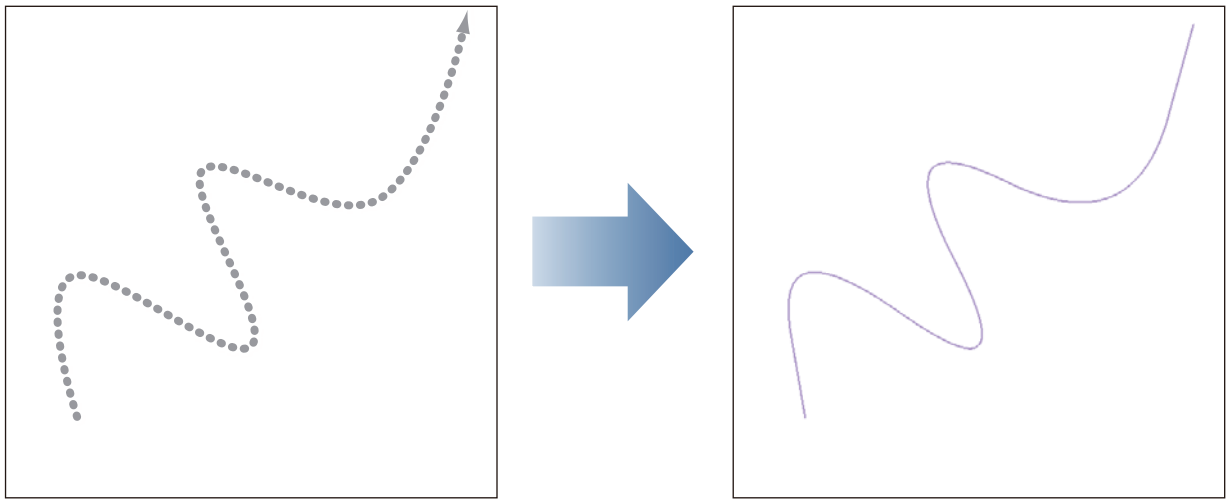
Memo

You can configure the ruler destination in [Create at editing layer] on the [Tool property] palette.

- **If [Create at editing layer] is turned on, the ruler is created in the layer being edited.**
- **If [Create at editing layer] is turned off, a layer is created at the bottom of the [Layer] palette, and the ruler, created there.**

4 Create the ruler

Drag on the canvas as if drawing to create the ruler.



Creating a ruler displays a ruler icon on the [Layer] palette.

Special ruler

To create a [Special ruler], proceed as follows.

1 Select the layer

On the [Layer] palette, select the layer where to create the ruler.

2 Select the tool

On the [Tool] palette, select the [Figure] tool.

3 Select the sub tool

On the [Sub tool] palette, select [Ruler].

(1) Click the [Create ruler] icon.

(2) Select [Special ruler].

4 Select the type of ruler

On the [Tool property] palette, select the shape for the ruler from [Special ruler].

Memo

You can configure the ruler destination in [Create at editing layer] on the [Tool property] palette.

- **If [Create at editing layer] is turned on, the ruler is created in the layer being edited.**
- **If [Create at editing layer] is turned off, a layer is created at the bottom of the [Layer] palette, and the ruler, created there. However for [Guide], if a layer named "Guide" is present, the ruler is created there.**

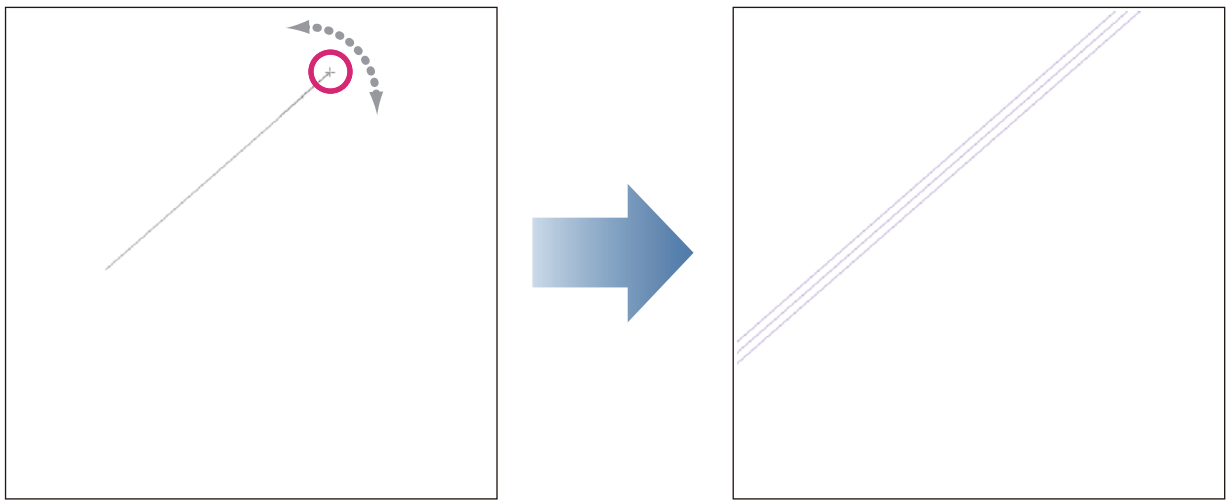
5 Create the ruler

Create the ruler on the canvas. Creating a ruler displays a ruler icon on the [Layer] palette.

The procedure to create the ruler varies depending on the shape selected in [Special ruler].

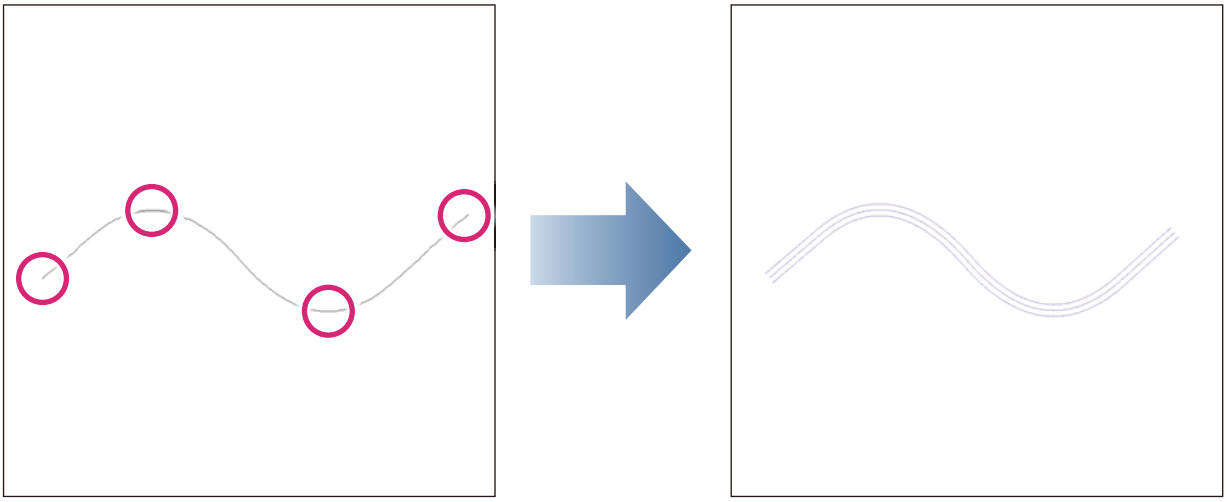
Parallel line

Drag on the canvas and adjust the ruler angle. Releasing the left button of the mouse creates the ruler.



Parallel curve

Specify the points that will be connected by the curve. Double clicking commits the drawn line and creates the ruler.

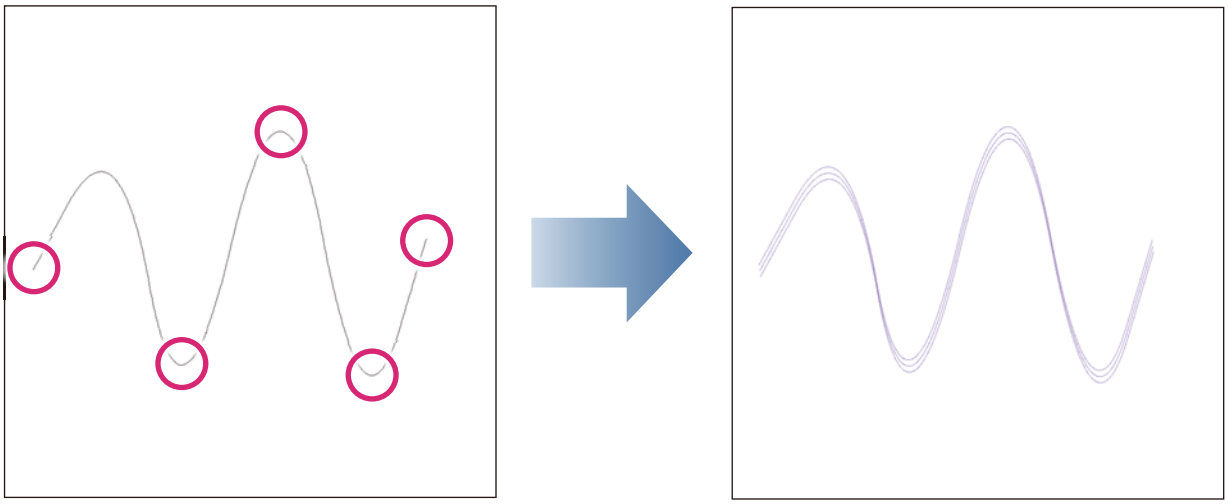


Memo

The drawing method for [Parallel curve ruler] is the same as that for [Continuous curve] of the [Figure] tool. For the drawing method for [Parallel curve rulers] other than [Spline], see "Drawing Continuous Curves" .

Multiple curve

Specify the points that will be connected by the curve. Double clicking commits the drawn line and creates the ruler.

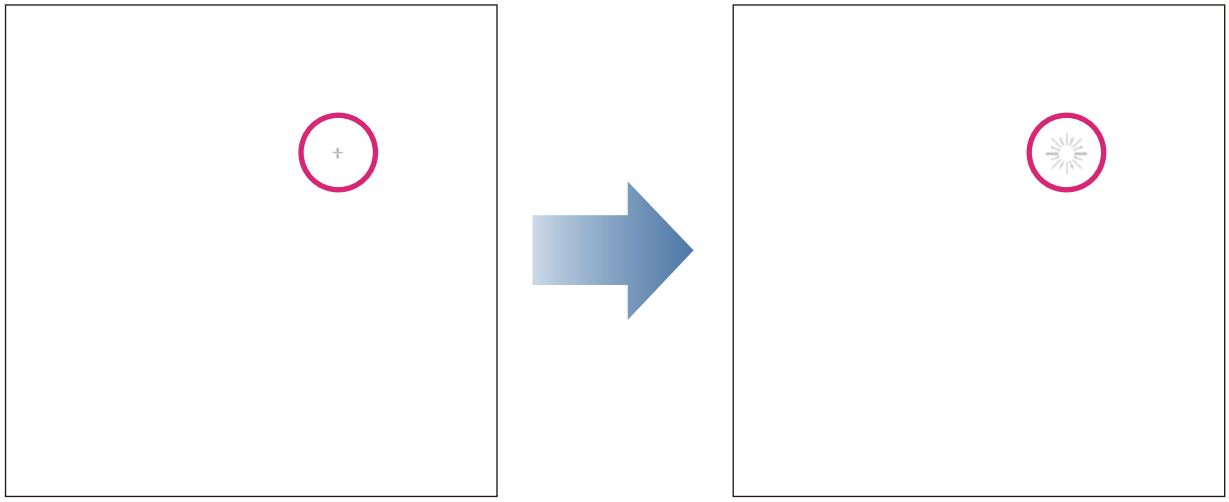


Memo

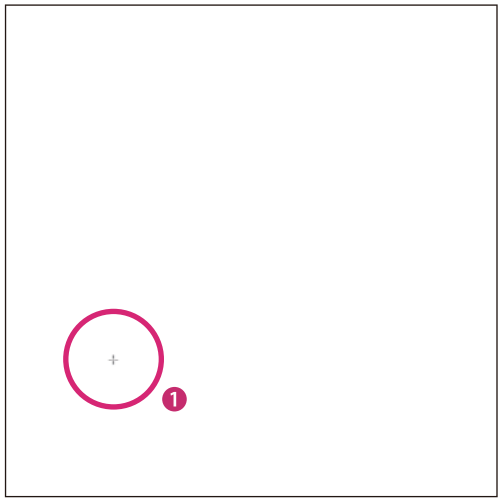
- **The drawing method for [Multiple curve ruler] is the same as that for [Continuous curve] of the [Figure] tool. For the drawing method for [Multiple curve rulers] other than [Spline], see "Drawing Continuous Curves" .**
- **Selecting a created ruler in the [Object] tool displays [Center of rotation]. Dragging [Center of rotation] allows you to configure the direction of drawing lines with the same shape as the ruler. For details on how to configure, see "Special ruler (multi-curve ruler)" .**

Focus line

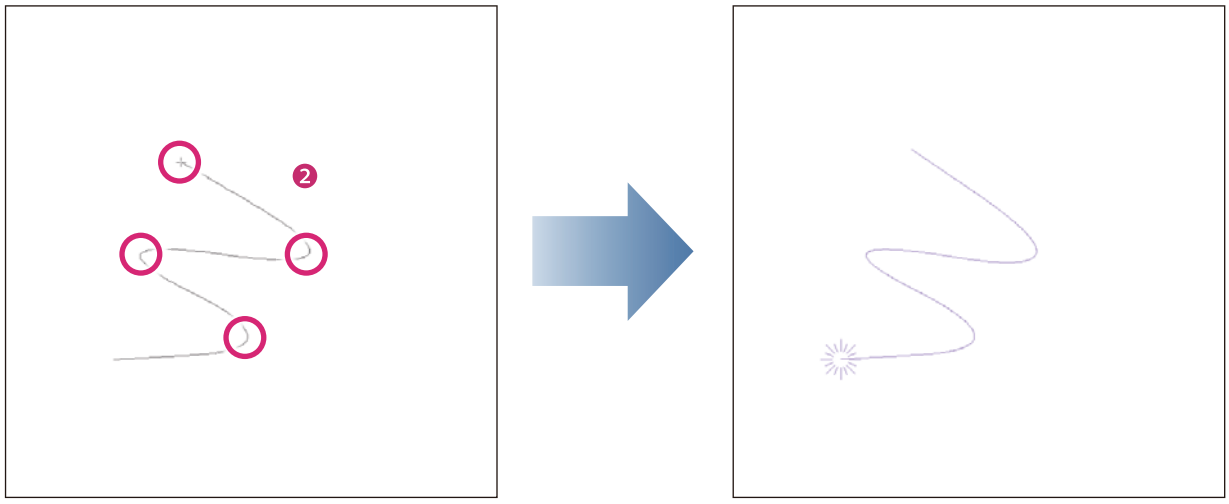
Clicking on the canvas creates the ruler. The clicked position is the center of the [Focus line ruler].



Focus curve



(1) Click the point to locate the center of the ruler.

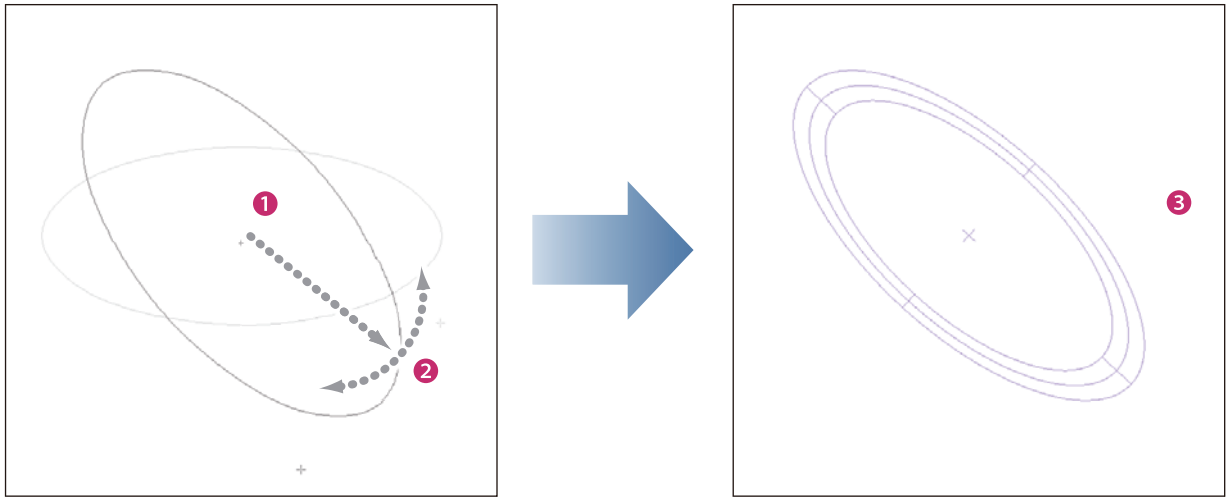


(2) Specify multiple points and draw a curved line connecting those points. Double clicking commits the drawn line and creates the ruler.

Memo

The drawing method for [Focus curve ruler] is the same as that for [Continuous curve] of the [Figure] tool. For the drawing method for [Focus curve rulers] other than [Spline], see "Drawing Continuous Curves" .

Concentric circle

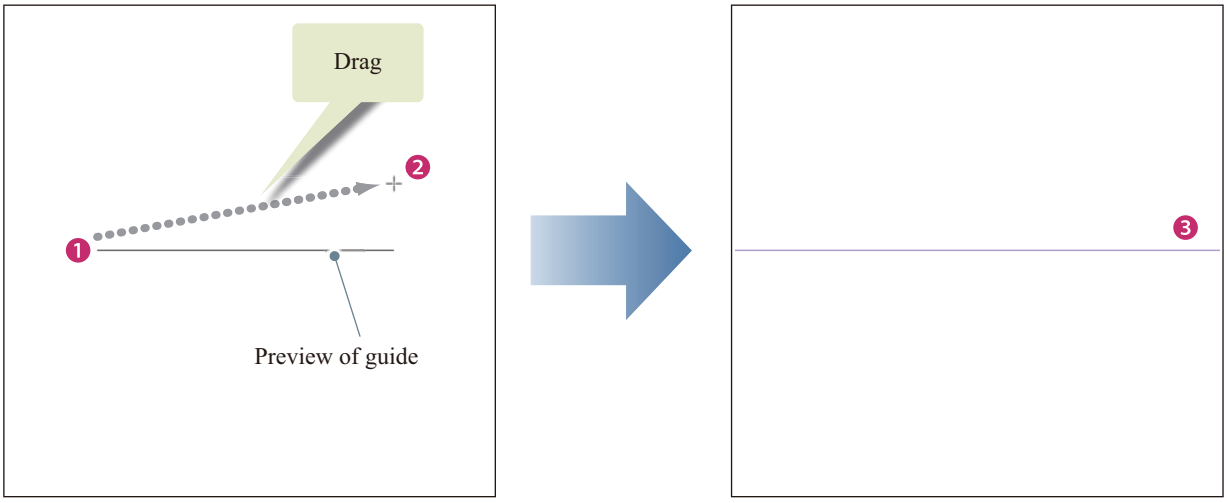


(1) From the desired center of the ruler, drag diagonally while pressing the mouse button. Release the mouse button at the end point.

(2) Dragging the canvas rotates the shape, allowing you to adjust its angle.

(3) Clicking the canvas commits the drawn line and creates the ruler.

Guide



(1) Drag from the point to create a guide. Drag in the horizontal direction to create an horizontal guide, and in the vertical direction to create a vertical guide.

(2) Release the mouse button when a preview displays in the desired guide direction.

(3) An horizontal or vertical guide is created.

Symmetrical ruler

To create a [Symmetrical ruler], proceed as follows.

1 Select the layer

On the [Layer] palette, select the layer where to create the ruler.

2 Select the tool

On the [Tool] palette, select the [Figure] tool.

3 Select the sub tool

On the [Sub tool] palette, select [Ruler].

(1) Click the [Create ruler] icon.

(2) Select [Symmetrical ruler].

Memo

You can configure the ruler destination in [Create at editing layer] on the [Tool property] palette.

- **If [Create at editing layer] is turned on, the ruler is created in the layer being edited.**
- **If [Create at editing layer] is turned off, a layer is created at the bottom of the [Layer] palette, and the ruler, created there.**

4 Configure the ruler

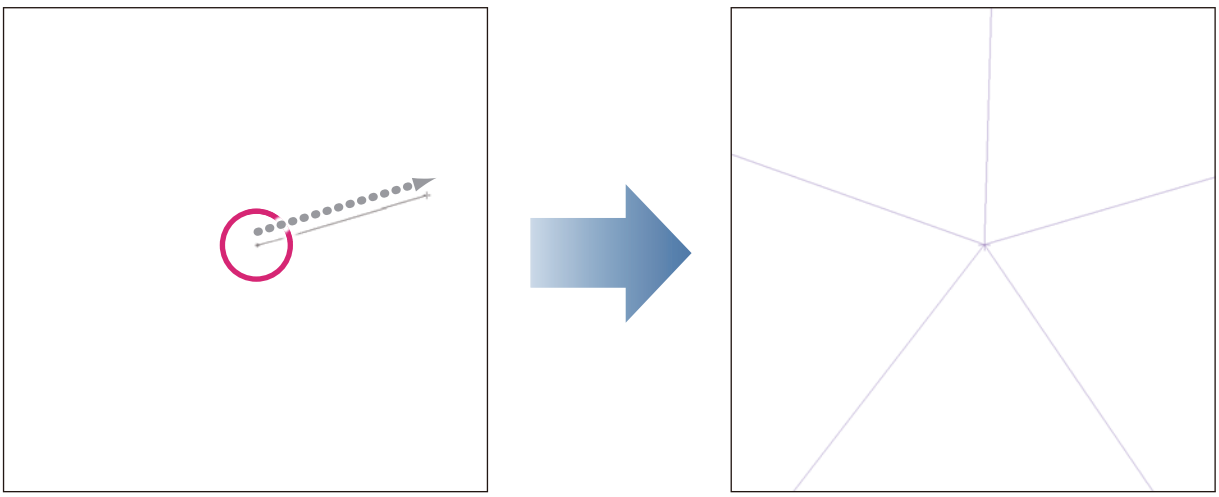
On the [Tool property] palette, configure the number of the lines of the symmetrical ruler, etc.

Memo

For details on the setting items on the [Tool property] palette, see the description of "Create symmetry ruler" in "Manga Studio 5.0 Tool Setting Guide".

5 Create the ruler

On the canvas, drag from the starting point to the end point of the ruler. The ruler is created.



Creating a ruler displays a ruler icon on the [Layer] palette.

Drawing by Snapping to a Ruler

This section describes how to configure the snap range of a ruler and draw by snapping to the ruler.

1 Configure the ruler range

Configure the desired snap range for the ruler.

Important **If the ruler to snap to is a [Special ruler] and it is displayed in green, you need to switch the ruler to snap to. For details on how to switch, see "Switching the Ruler to Snap to (Special Ruler)" .**

(1) On the [Layer] palette, select the layer including the ruler for which to configure the snap range.

(2) Configure the snap range in [Set showing area of ruler] on the [Layer] palette,

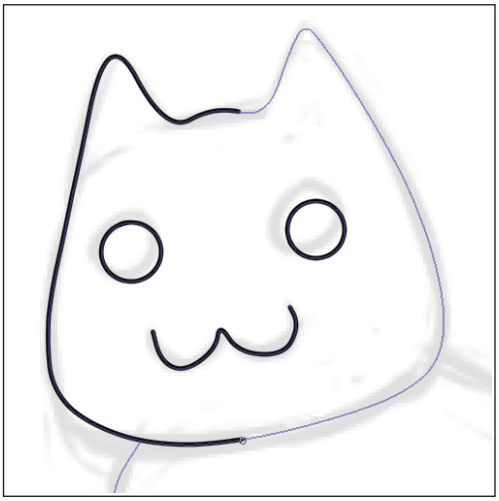
Show in all layers	The snap range extends to all [Raster] layers and [Vector] layers.
Show in same folder	The snap range extends to all [Raster] layers and [Vector] layers within the same layer folder. When there is no layer folder, this becomes the same as [Show in all layers].
Show only when editing target	The snap range is limited to the currently configured layer.

2 Select the layer to draw

On the [Layer] palette, select a layer to draw.

3 Draw on the canvas

Drawing on the canvas with a drawing-type tool snaps the drawing to the ruler.



Switching the Ruler to Snap to (Special Ruler)

You can only snap to one [Special ruler] even if there are multiple [Special rulers] in the ruler range. You must select the ruler to which to snap to according to the procedure below.

Important

- **A drawing is not snapped to a [Special ruler] displayed in green. To snap to a ruler displayed in green, you must first switch the ruler to snap to by following the procedure below.**
- **Switching the ruler to snap to is not necessary for rulers other than [Special rulers].**

1 Check whether snap to special ruler is enabled

Open the [View] menu and check if [Snap to special ruler] has a check mark or not. If it does not have a check mark, select [Snap to special ruler].

2 Select the tool

On the [Tool] palette, select the [Operation] tool.

3 Select the sub tool

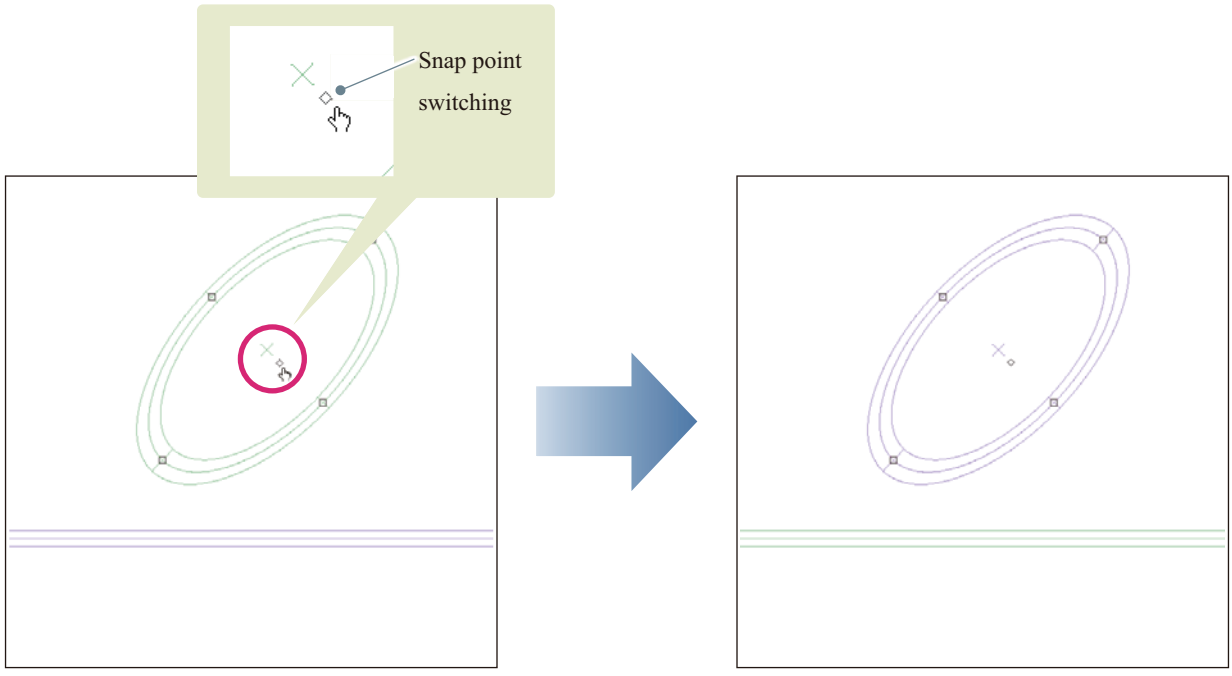
On the [Sub tool] palette, select [Object].

4 Select the ruler

Click the ruler to snap to.

5 Configure as snap point

Click [Change special ruler snap]. The ruler becomes the snap point when its color changes from green to violet,



Memo

- **The ruler to snap to can also be changed from [Snap] on the [Tool property] palette.**
- **The ruler to snap to can also be changed from [View] menu → "Change Special Ruler Snap" .**
- **Multiple special rulers may be displayed in violet when the selected layer has been switched, for example. In this case, select the ruler to which to snap to, and click [Change special ruler snap].**

Snapping Fill/Auto select to Symmetrical Ruler

When using the [Fill] tool or the [Auto select] tool, you can fill or select snapped to the [Symmetrical ruler].

1 Select the tool

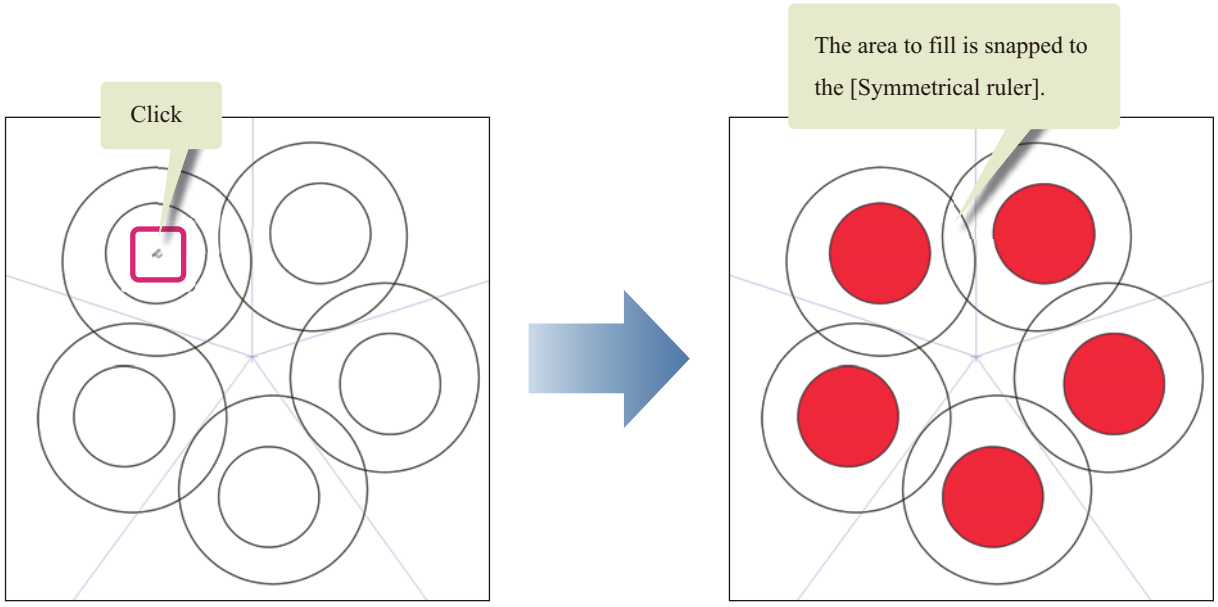
Select [Fill] tool or [Auto select] tool. In this example, the [Fill] tool is selected.

2 Configure the [Sub tool detail] palette

Open the [Sub tool detail] palette and turn on [Snap to symmetrical ruler] under [Fill].

3 Fill

Select a layer included in the snap range of the [Symmetrical ruler] and fill. The area to fill is snapped to the [Symmetrical ruler].



Editing a Ruler

A created ruler can be edited or reconfigured from the [Object] tool, [Correct line] tool, [Layer] palette or [Tool property] palette.

This section describes how to edit or reconfigure a ruler with each palette and tool.

Editing with the Object Tool

With the [Object] tool, you can move, transform or rotate a created ruler.

Moving a Ruler

To move a ruler, proceed as follows.

1 Select the layer

On the [Layer] palette, select the layer including the ruler to edit.

2 Select the tool

On the [Tool] palette, select the [Operation] tool.

3 Select the sub tool

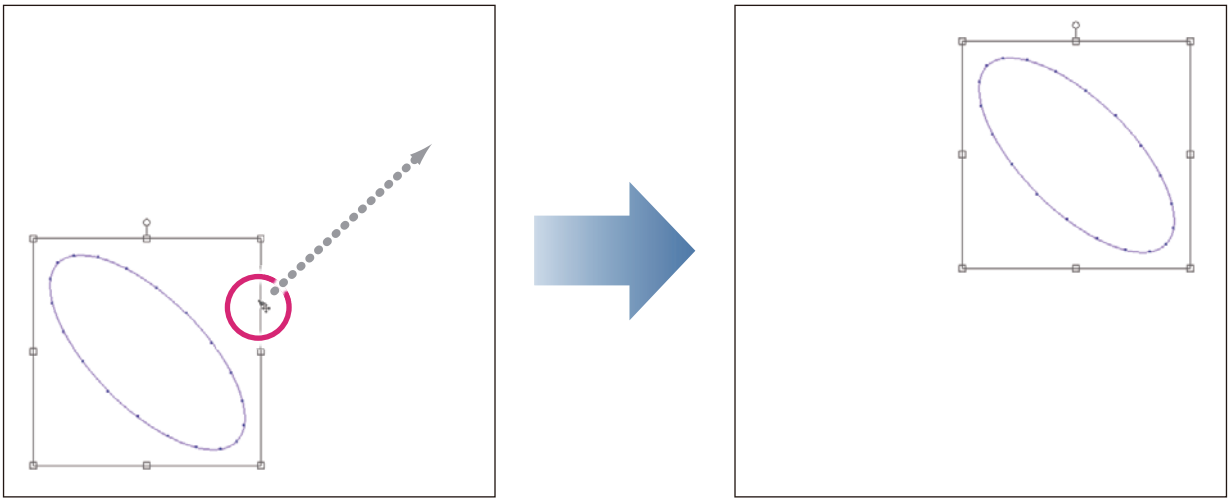
On the [Sub tool] palette, select [Object].

4 Move the ruler

The method to move the ruler varies depending on the ruler type.

Lliner ruler, curve ruler, figure ruler or ruler pen

To move the ruler, drag the ruler line or handle around the ruler.

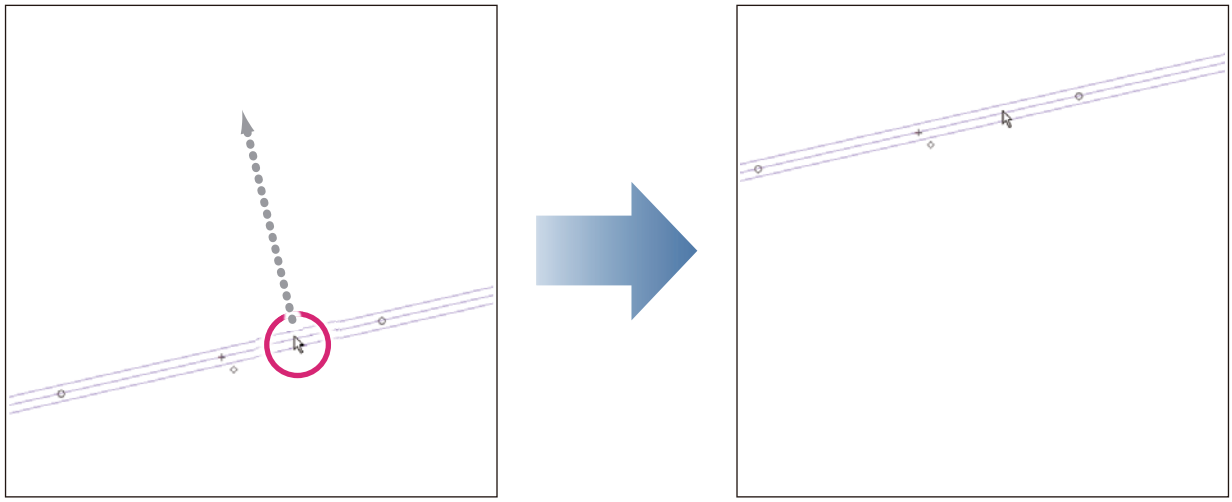


Memo

To select multiple rulers, click the additional rulers sequentially while holding down the [Shift] key.

Special ruler (other than the concentric circle ruler)

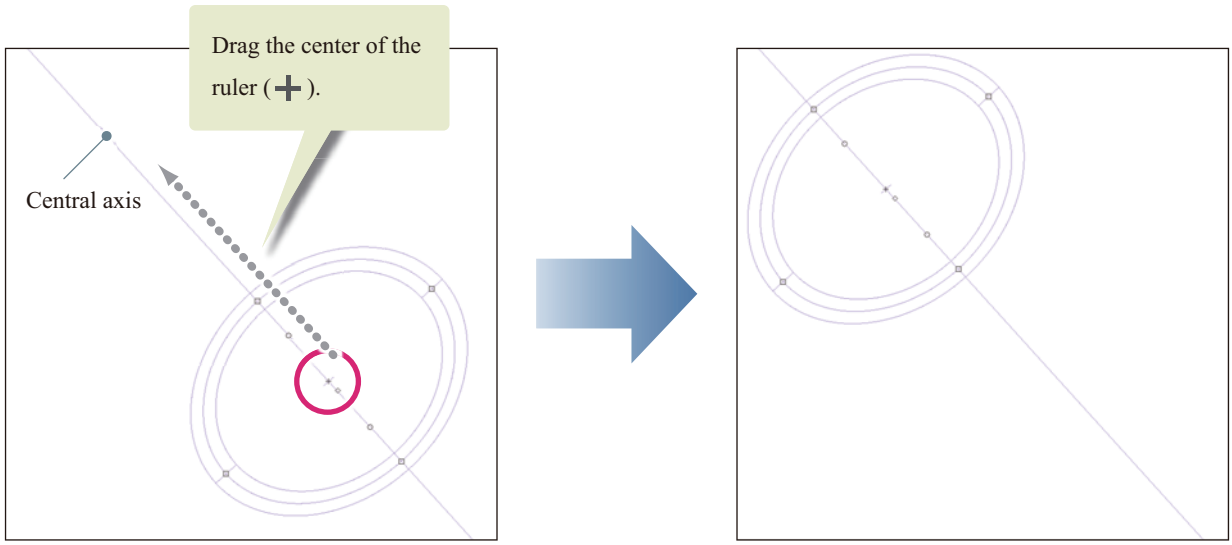
In the case of special rulers other than the concentric circle ruler, dragging on the line of the ruler moves it.



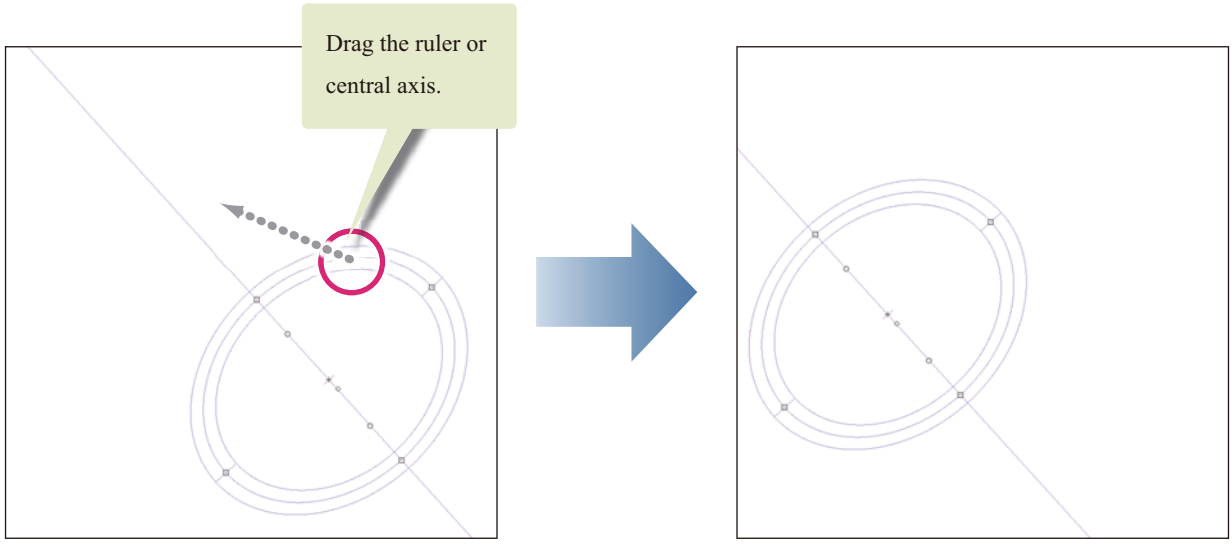
Special ruler (concentric circle ruler)

The concentric circle ruler can be moved along the central axis or freely.

Dragging the center of the ruler (+) allows you to move it along the central axis.

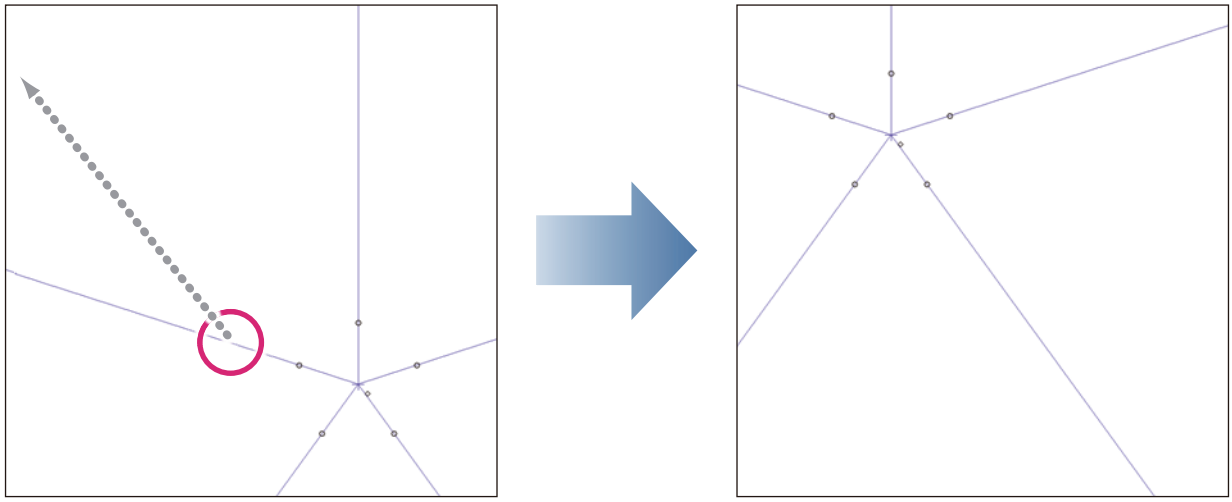


Dragging on the line or the central axis of the ruler allows you to move it freely.



Symmetrical ruler

Dragging on the line of the ruler moves it.



Transforming a Ruler

To transform a ruler, proceed as follows.

1 Select the layer

On the [Layer] palette, select the layer including the ruler to edit.

2 Select the tool

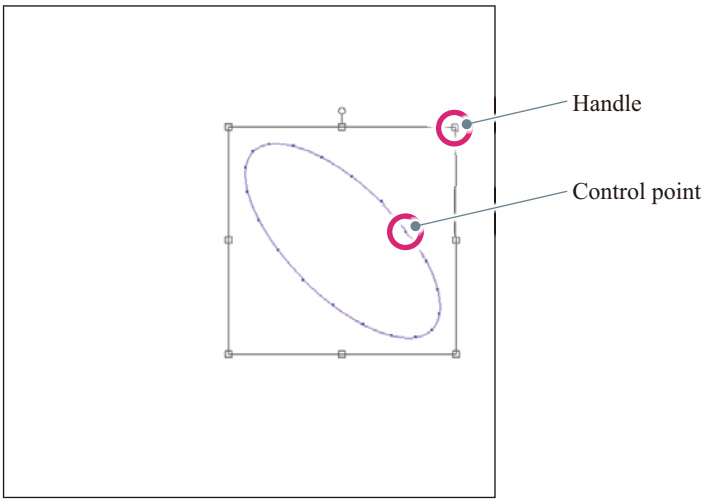
On the [Tool] palette, select the [Operation] tool.

3 Select the sub tool

On the [Sub tool] palette, select [Object].

4 Select the ruler

Click the ruler to transform. [Handles] and [Control points] are displayed on the ruler.

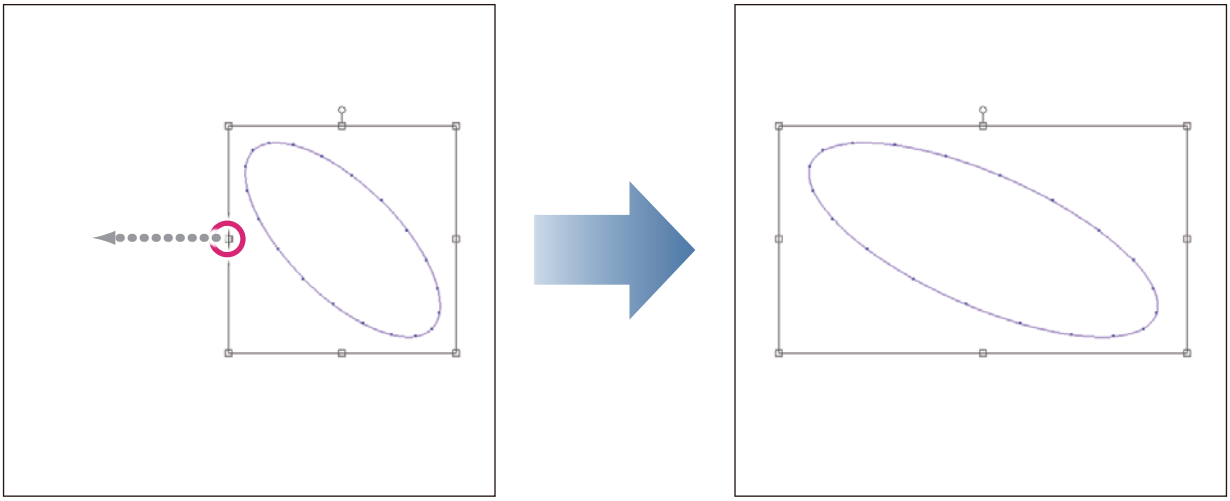


5 Transform the ruler

The method to transform the ruler varies depending on the ruler type.

Lliner ruler, curve ruler, figure ruler or ruler pen

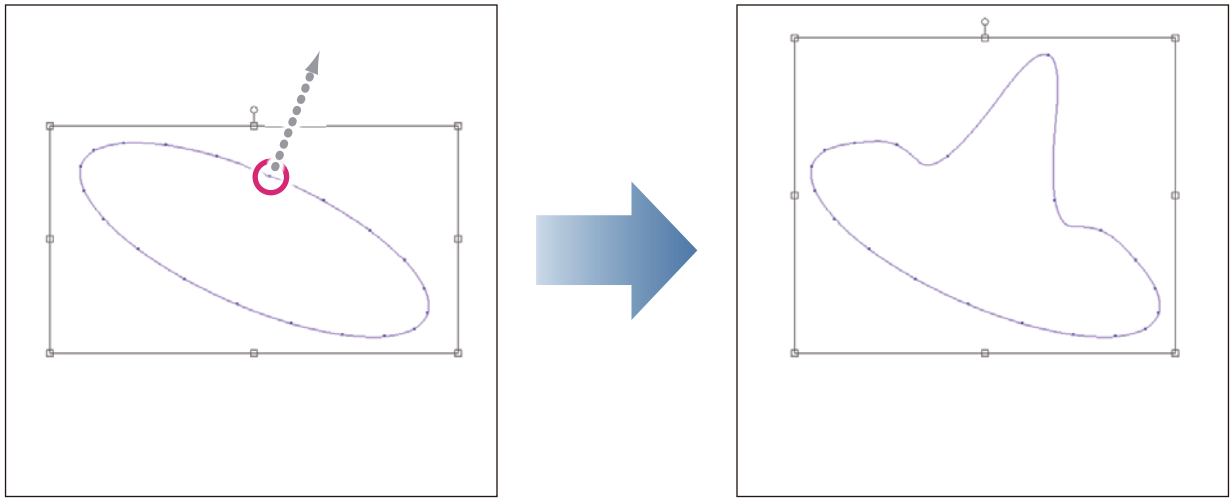
Dragging a [Handle] or [Control point] transforms the ruler.



(1) Dragging a [Handle] transforms the entire ruler.

Memo

You can select multiple control points. For details on how to select, see "Selecting Multiple Control Points" .



(2) Dragging a [Control point] only transforms the ruler portion near the [Control point].

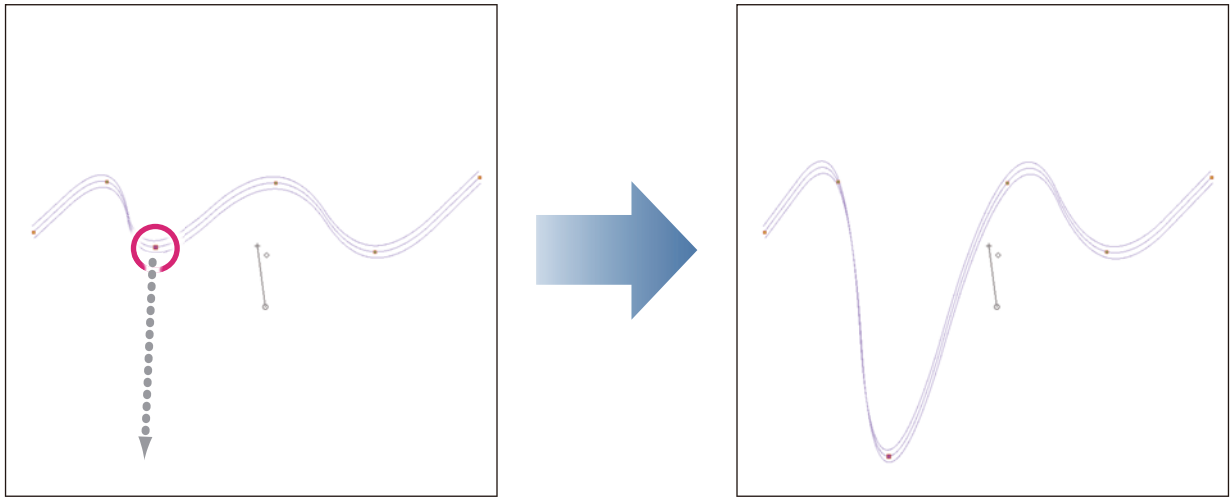
Memo

- You can select multiple control points. For details on how to select, see "Selecting Multiple Control Points" .
- The [Control point] sub tool of the [Correct line] tool allows you to move, add, delete, etc. the control points. For details on how to operate, see "Control point" .

Special ruler (Parallel curve ruler/multi-curve ruler/concentric circle ruler/focus curve ruler)

Transform is possible only for [Parallel curve ruler], [Multi-curve ruler], [Concentric circle ruler] and [Focus curve ruler].

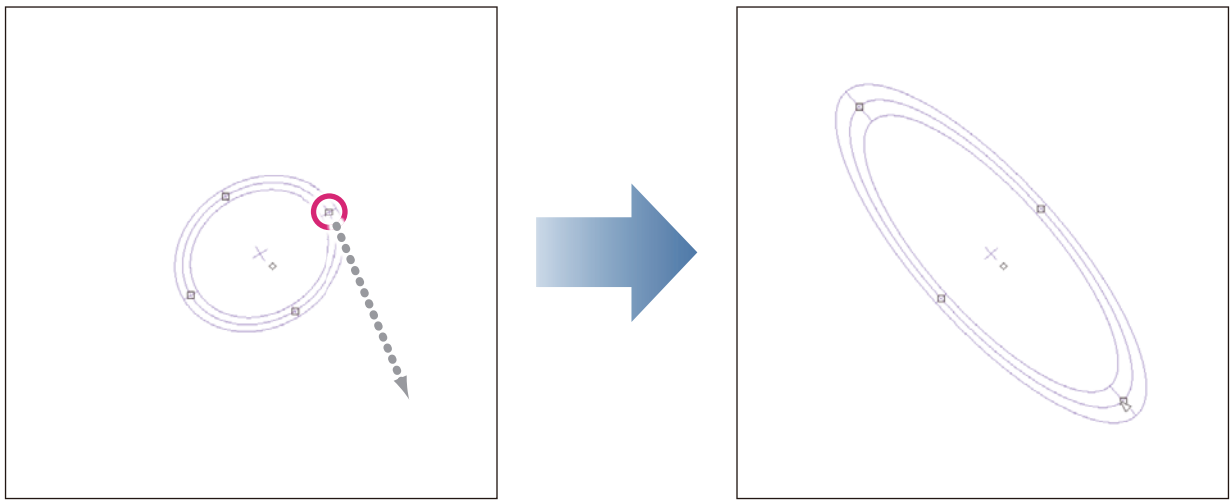
To transform a [Parallel curve ruler], [Multi-curve ruler], [Concentric circle ruler] and [Focus curve ruler], drag a control point on the ruler.



Memo

- You can select multiple control points. For details on how to select, see "Selecting Multiple Control Points" .
- The [Control point] sub tool of the [Correct line] tool allows you to move, add, delete, etc. the control points. For details on how to operate, see "Control point" .

To transform a [Concentric circle ruler], drag a handle on the ruler.



Rotating a Ruler

To rotate a ruler, proceed as follows.

Memo

- **The types of rulers that can be rotated are [Lliner ruler], [Curve ruler], [Figure ruler], [Ruler pen], [Special ruler (Multi-curve ruler)], [Special ruler (Concentric circle ruler)], and [Symmetrical ruler].**
- **Rulers created by [Lliner ruler], [Curve ruler], [Figure ruler], or [Ruler pen] can be rotated by a shortcut key. You can configure the shotcut key to rotate a ruler in the [Shortcut settings] dialog box. For how to configure, see "Shortcut settings [Windows]" . For items that can be configured, see "Shortcut List" → "Optional shortcuts" .**
- **Rotating a ruler by the shortcut key, displays the center of the rotation and rotates the ruler around the center. Dragging the center by the [Object] tool, allows you to adjust its position.**

1 Select the layer

On the [Layer] palette, select the layer including the ruler to edit.

2 Select the tool

On the [Tool] palette, select the [Operation] tool.

3 Select the sub tool

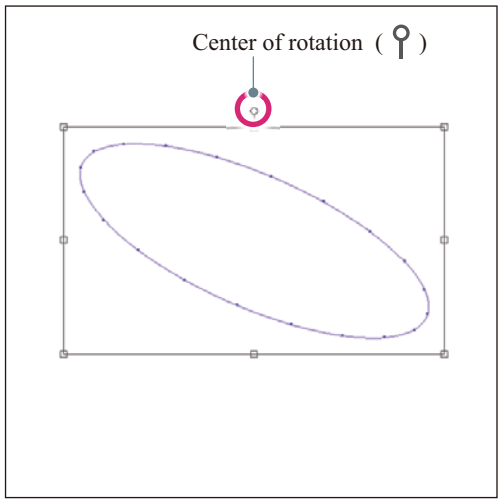
On the [Sub tool] palette, select [Object].

4 Select the ruler

Click the ruler to transform. The [Center of rotation] is displayed for the ruler.

Memo

For [Special ruler (Multi-curve ruler)], [Special ruler (Concentric circle ruler)], and [Symmetrical ruler], a [Center of rotation] of different shape is displayed.

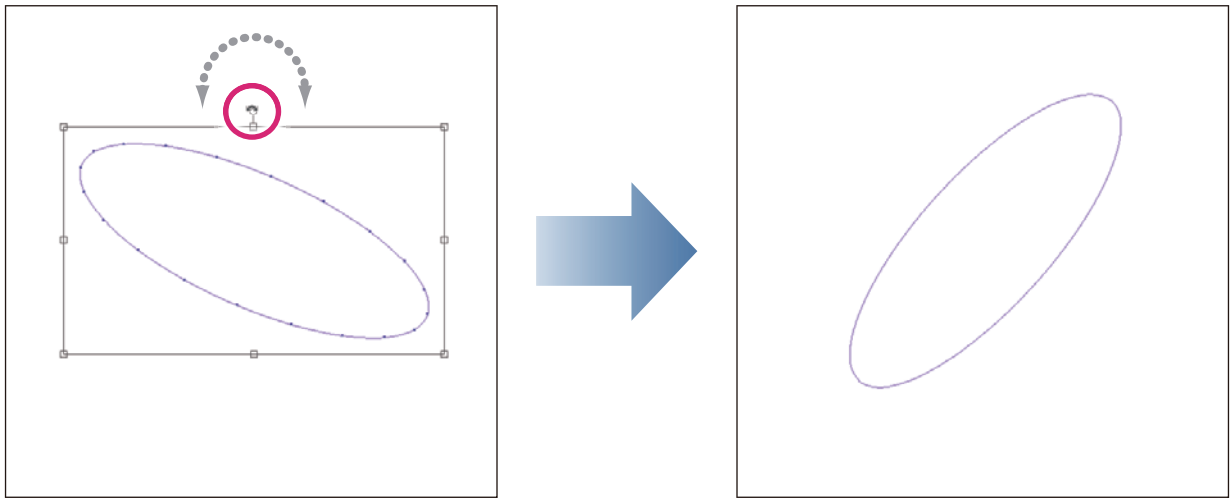


5 Rotate the ruler

The method to rotate the ruler varies depending on the ruler type.

Lliner ruler, curve ruler, figure ruler or ruler pen

Place the mouse cursor on the [center of rotation]. Dragging the center of rotation rotates the ruler.

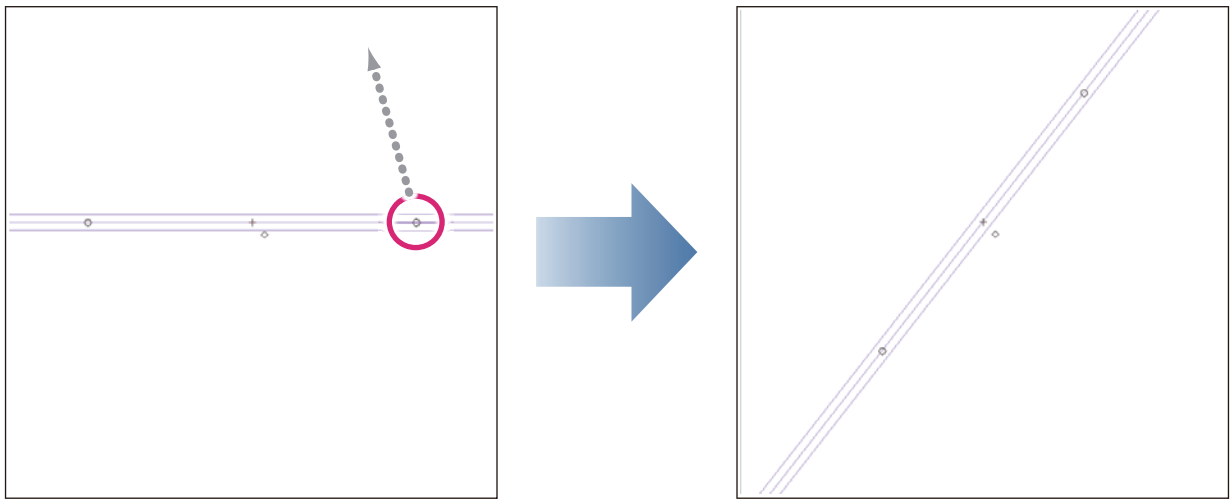


Memo

To select multiple rulers, click the additional rulers sequentially while holding down the [Shift] key.

Special ruler (parallel ruler)

Specify the center of rotation, and drag [Center of rotation] on the ruler.



(1) Drag the center of rotation (+) by the [Object] tool and determine the position.

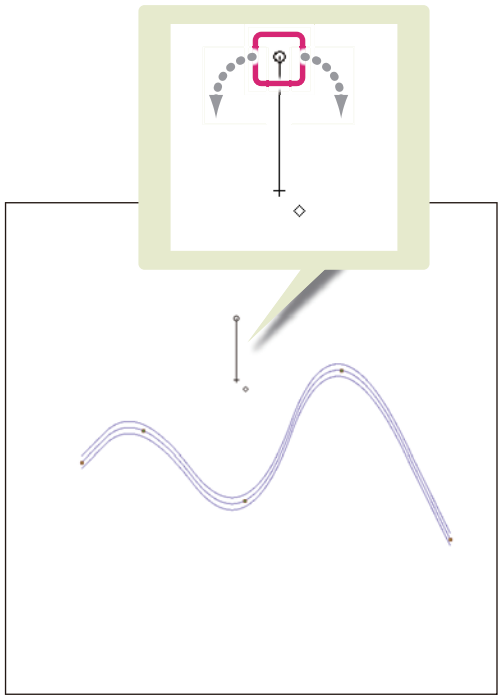
(2) Dragging [Center of rotation] on the ruler rotates the ruler.

Memo

- **Dragging on the canvas with the [Object] sub tool after turning on [Set direction of parallel line ruler] by selecting [Operation of transparent part] on the [Tool property] palette allows you to specify the direction of the parallel line ruler.**
- **Specifying the angle in [Angle] on the [Tool property] palette, allows you to adjust the orientation of the ruler.**

Special ruler (multi-curve ruler)

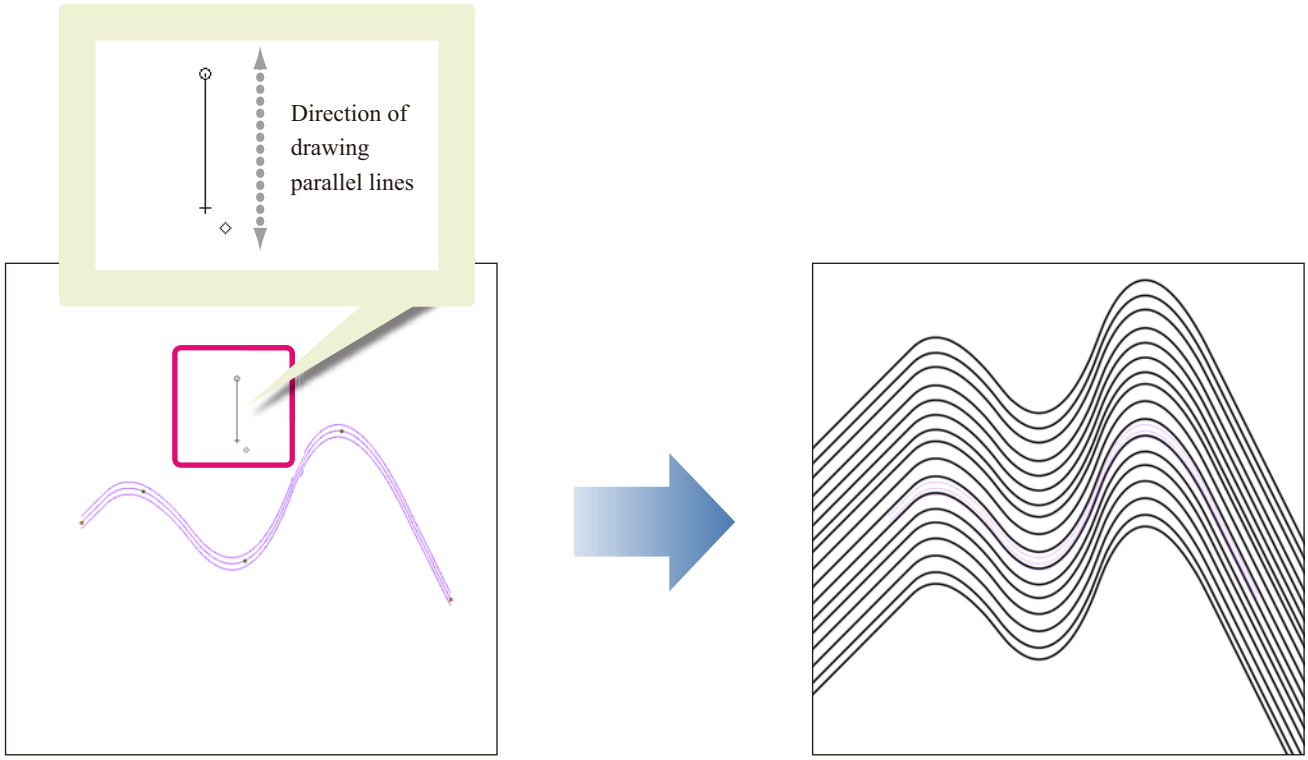
For [Multi-curve ruler], dragging [Center of rotation] allows you to set the direction for drawing lines with the same shape as the ruler.



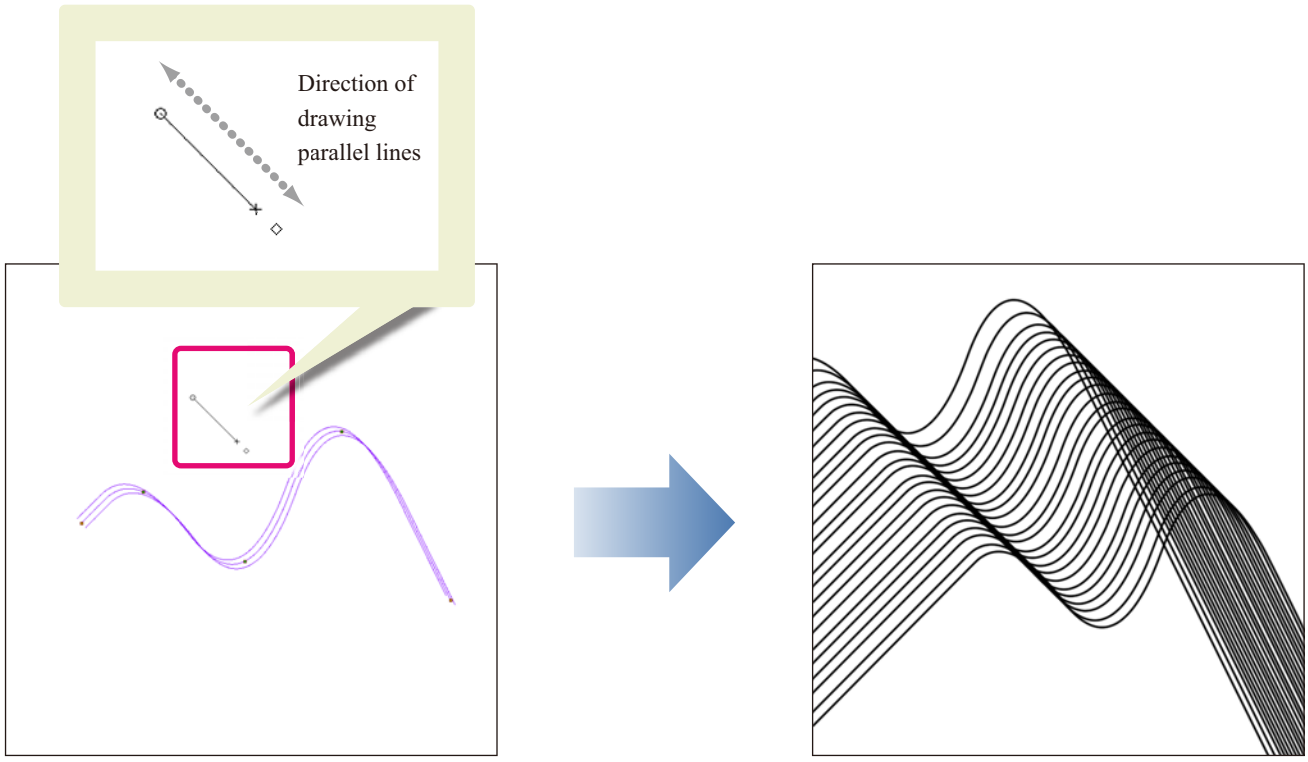
Memo

Specifying the angle in [Angle] on the [Tool property] palette, allows you to adjust the direction.

The following figure shows drawing by snapping the ruler.



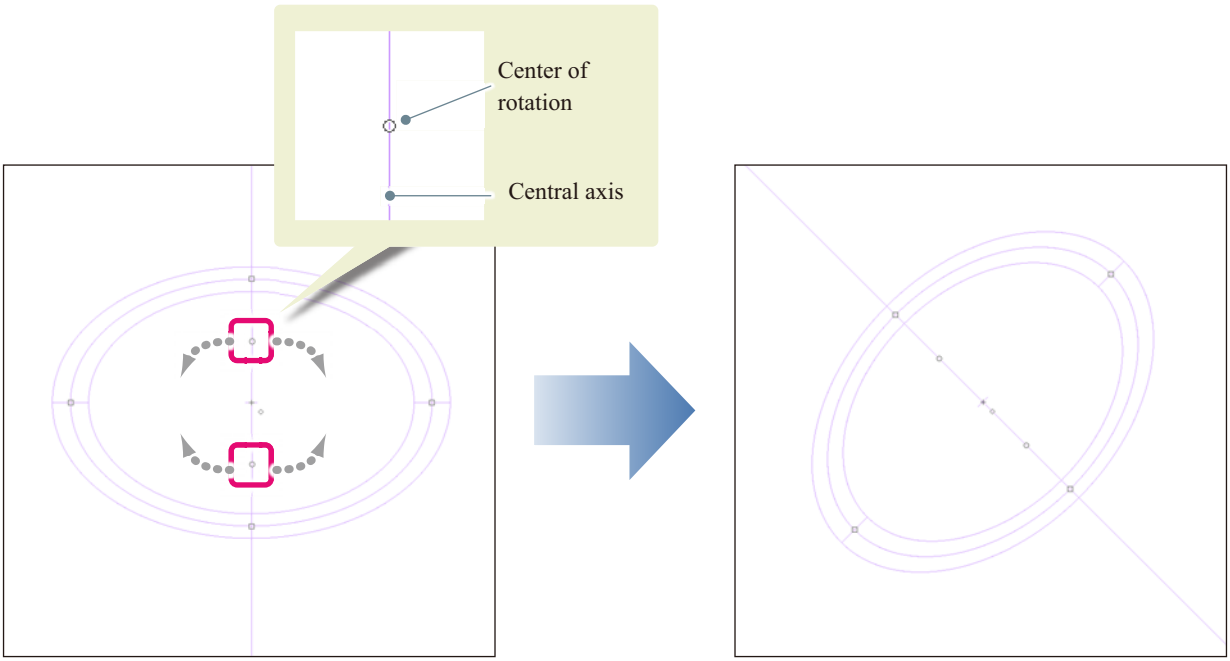
Angle of the center of rotation: -90



Angle of the center of rotation: -135

Special ruler (concentric circle ruler)

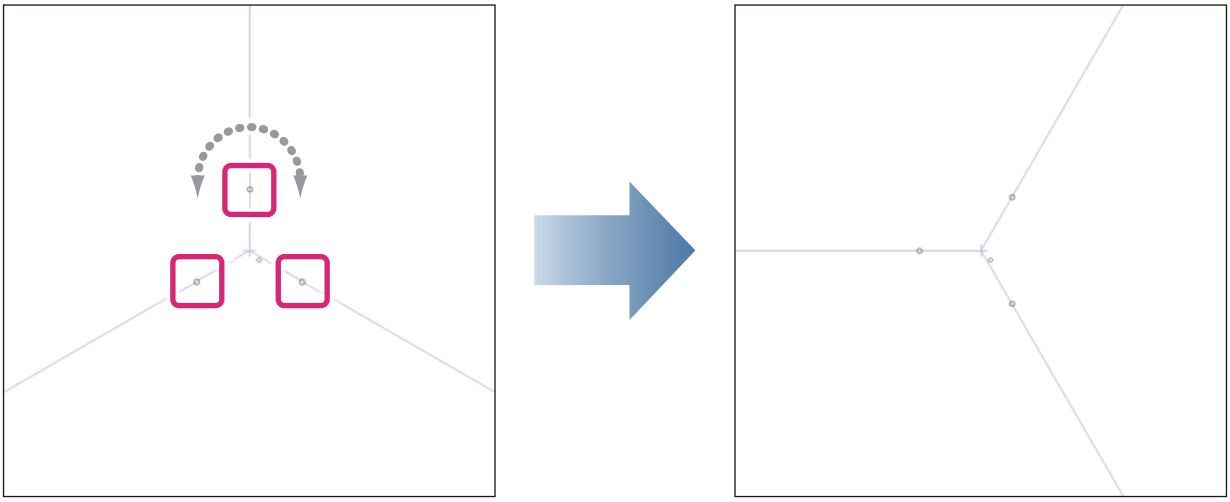
Dragging [Center of rotation] on the central axis rotates the ruler.



Memo Specifying the angle in [Angle] on the [Tool property] palette, allows you to adjust the orientation of the ruler.

Symmetrical ruler

Place the mouse cursor on the [center of rotation]. Dragging the center of rotation rotates the ruler.



Memo Specifying the angle in [Angle] on the [Tool property] palette, allows you to adjust the orientation of the ruler.

Right-click Menu during Object Tool Use

Right clicking [Focus curve] ruler, [Parallel curve] ruler or [Multi-curve] ruler when the [Object] sub tool of the [Operation] tool is selected displays a menu. From the displayed menu, you can perform the following operations that are available from [Correct line] tool → [Control point] sub tool.

- Add control point
- Delete control point
- Switch corner

Memo

For details on the operations you can perform, see "Control point" .

Editing with the Layer Palette

The [Layer] palette allows you to move all rulers included in the currently edited layer to another layer as well as delete them all. Furthermore, when using the [Move layer] tool, you can configure whether to move the rulers along with the drawing area of the currently edited layer, or separately.

Moving All Rulers to Another Layer

Drag the ruler icon displayed on the [Layer] palette to another layer. All rulers included in the layer are moved to the drag destination.

Deleting All Rulers within a Layer

Drag the ruler icon displayed on the [Layer] palette and drop to [Delete layer]. All rulers included in the layer are deleted.

Linking Rulers to a Layer

When using the [Move layer] tool, you can configure whether to move the rulers along with the drawing area of the currently edited layer, or separately.

Moving the Drawing Area along with Rulers

1 Select the layer

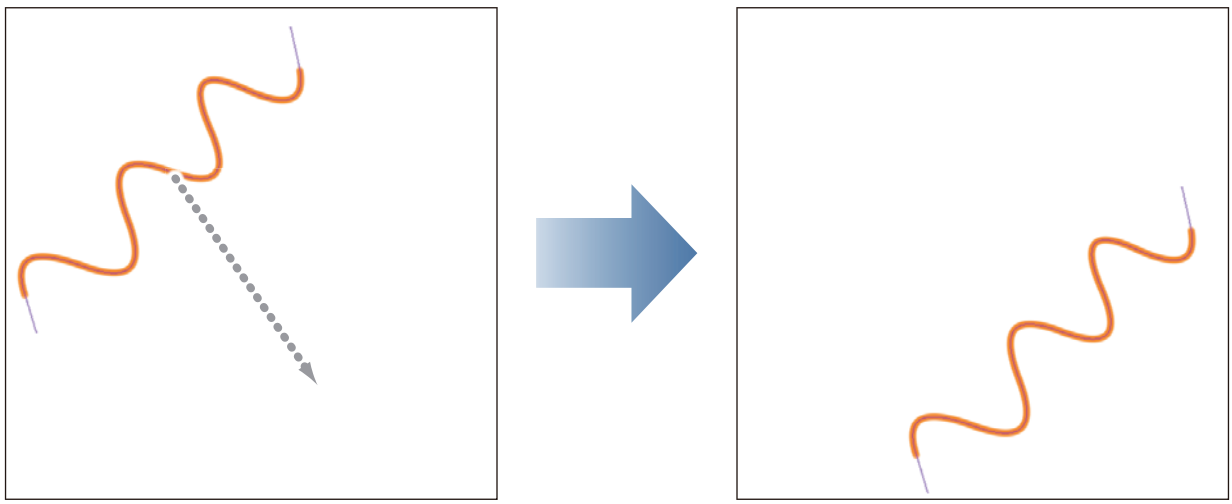
On the [Layer] palette, select the layer for which to configure a link.

2 Link rulers to the layer

Click the left side of the ruler icon to turn on the check mark.

3 Move the drawing area along with rulers

Use the [Move layer] tool. The drawing area and rulers on the currently edited layer are moved in one go.



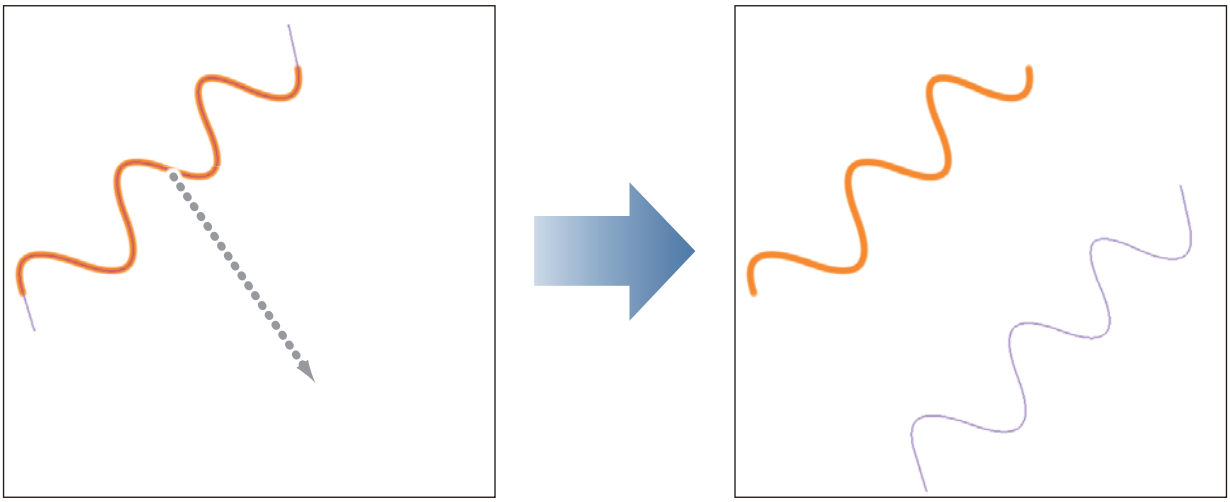
Moving the Drawing Area and Rulers Separately

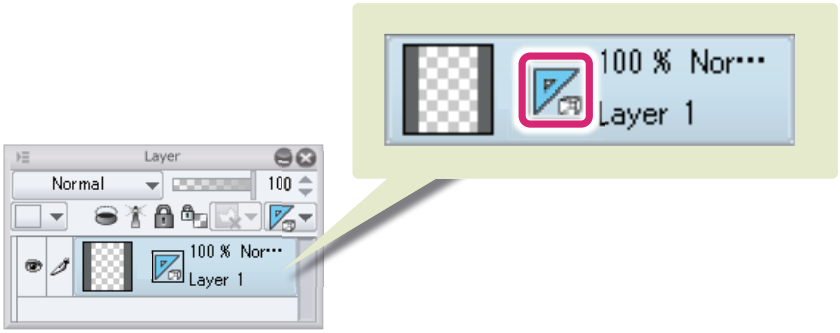
1 Cancel the link between rulers and layer

On the [Layer] palette, click the left side of the ruler icon to turn off the check mark.

2 Move only the rulers

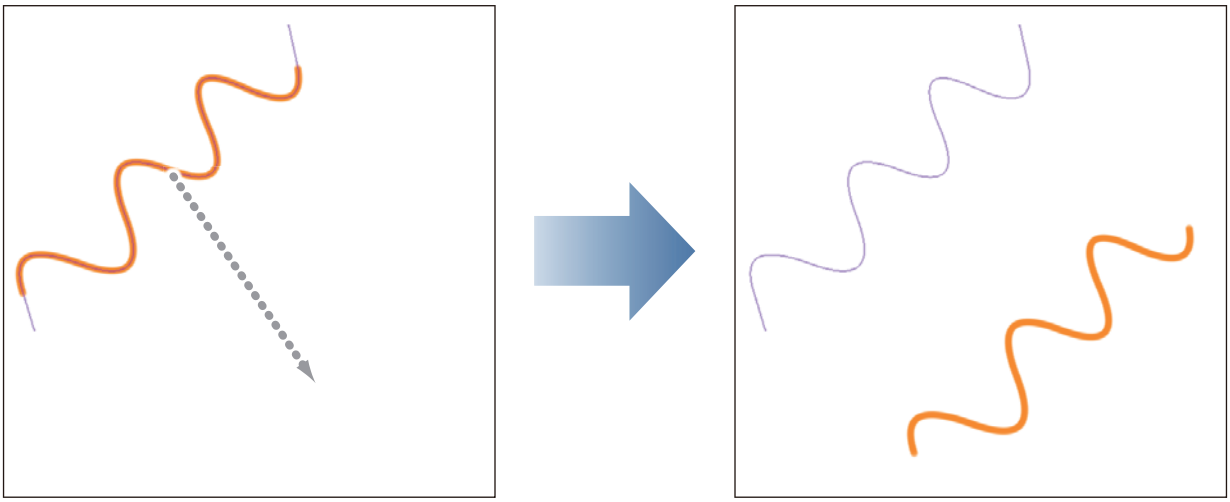
Use the [Move layer] tool after clicking the ruler icon. Only the rulers move.

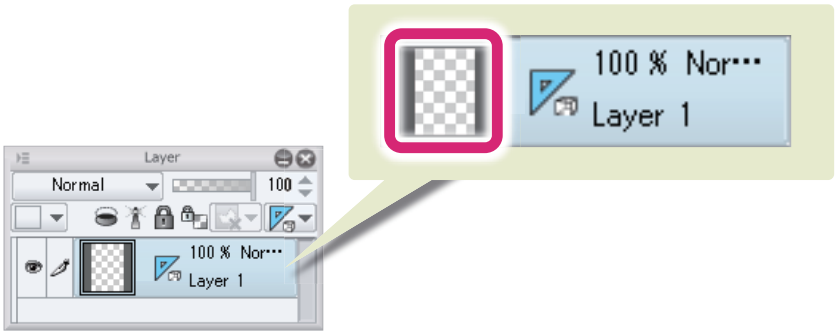




3 Move only the drawing area

Use the [Move layer] tool after clicking the layer thumbnail. Only the drawing area moves.





Configuring a Ruler Range

[Set showing area of ruler] on the [Layer] palette allows you to configure the snap range of a ruler.

1 Select the ruler

On the [Layer] palette, select the ruler for which to configure the snap range.

2 Configure the ruler snap range

Configure the snap range in [Set showing area of ruler] on the [Layer] palette.

Show in all layers	The snap range extends to all [Raster] layers and [Vector] layers.
Show in same folder	The snap range extends to all [Raster] layers and [Vector] layers within the same layer folder. When there is no layer folder, this becomes the same as [Show in all layers].
Show only when editing target	The snap range is limited to the currently configured layer.

Editing by the [Tool property] palette

Clicking a created ruler with the [Object] tool, displays the items to adjust the ruler position, angle, etc. on the [Tool property] palette. The items you can configure vary depending on the ruler type. For details, see "Manga Studio 5.0 Tool Setting Guide".

Deleting a Ruler

This section describes how to delete a ruler.

Deleting All Rulers within a Layer

Either of the methods below deletes all rulers within a layer.

- On the [Layer] palette, select the layer from which to delete the rulers. Selecting [Layer] menu → [Ruler] → [Delete ruler] deletes all rulers within the layer.
- Drag the ruler icon displayed on the [Layer] palette and drop to [Delete layer]. All rulers included in the layer are deleted. For details, see "Deleting All Rulers within a Layer" .

Deleting a Selected Ruler

To delete a selected ruler, proceed as follows.

1 Select the tool

On the [Tool] palette, select the [Operation] tool.

2 Select the sub tool

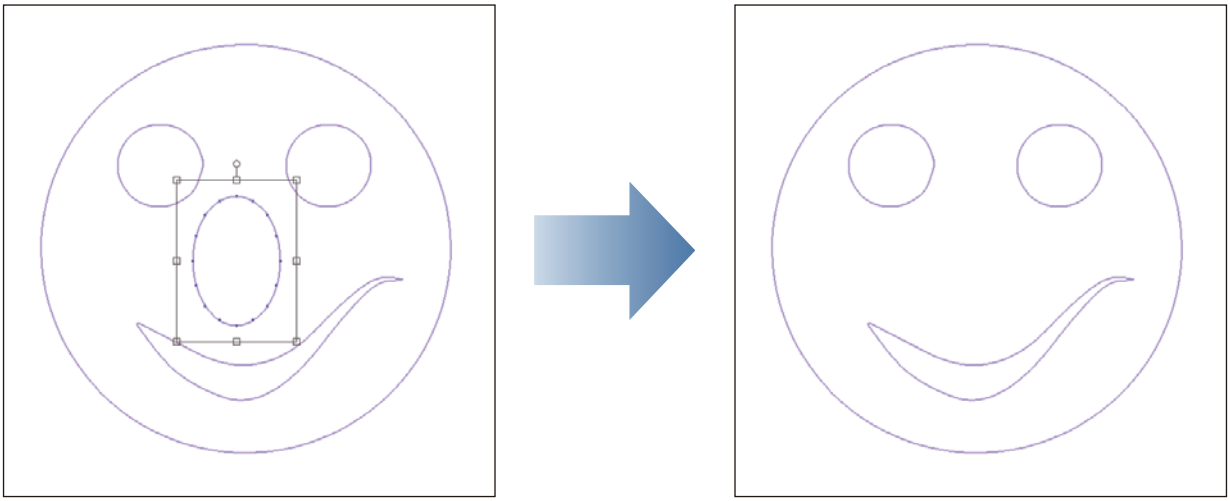
On the [Sub tool] palette, select [Object].

3 Select the ruler

Click the ruler to delete.

4 Delete the selected ruler

Press the [Delete] key. The selected ruler is deleted.



Memo

Selecting [Layer] menu → [Ruler] → [Delete ruler] in step 4 also allows you to delete the ruler. If no ruler is selected when deleting with [Delete ruler], all rulers within the currently edited layer will be deleted.

Explanation: Perspective ruler

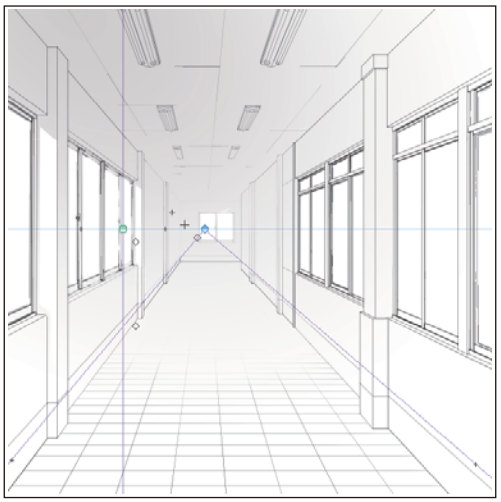
This chapter describes how to create a perspective ruler, how to draw snapped to a perspective ruler and how to edit a perspective ruler.

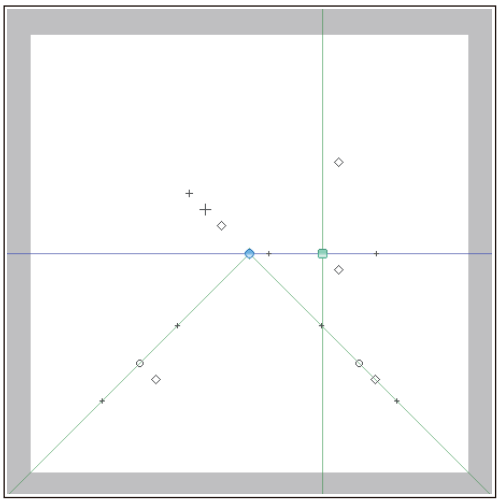
What Is a Perspective Ruler?

Selecting [Layer] menu → [Ruler] → [Create perspective ruler] allows you to create a ruler for perspective drawing with up to 3 vanishing points.

One-point Perspective

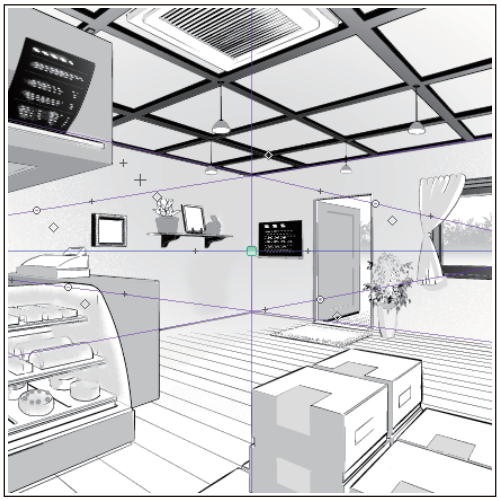
A drawing technique where straight lines making up the target objects are drawn to converge on one vanishing point. This is used to emphasize depth, such as when drawing a long corridor seen from the front.

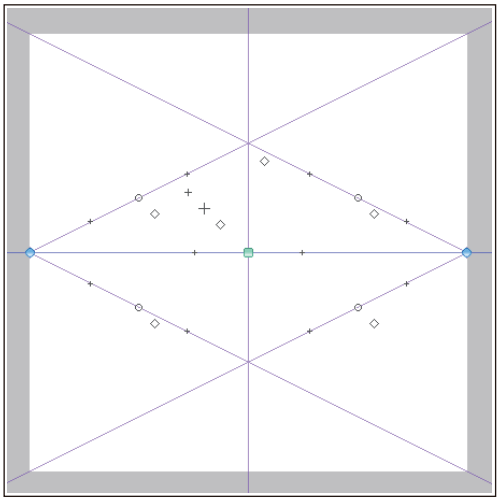




Two-point Perspective

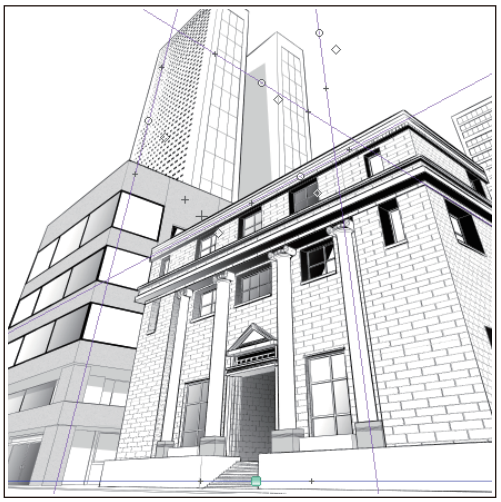
A drawing technique with two vanishing points on the same horizon line. Here, straight lines of one of the pairs making up the target objects are drawn to converge on the right vanishing point while those of the other are drawn to converge on the left vanishing point. This is used to draw an object from an oblique angle.

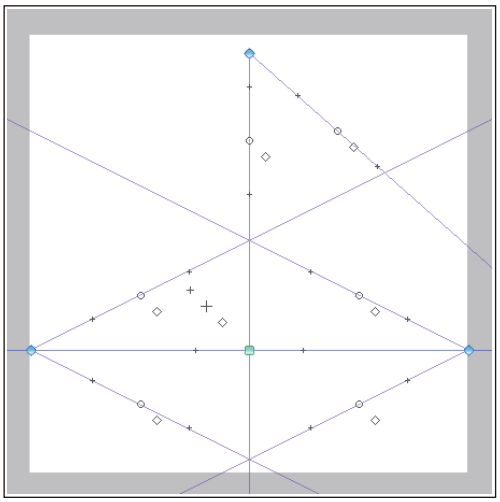




Three-point Perspective

A drawing technique with two vanishing points on a horizon line and a third vanishing point either above or below the horizon line. The straight lines making up the target objects are drawn so that they converge on their respective vanishing points. This is used to draw a tall building seen from below, for example.

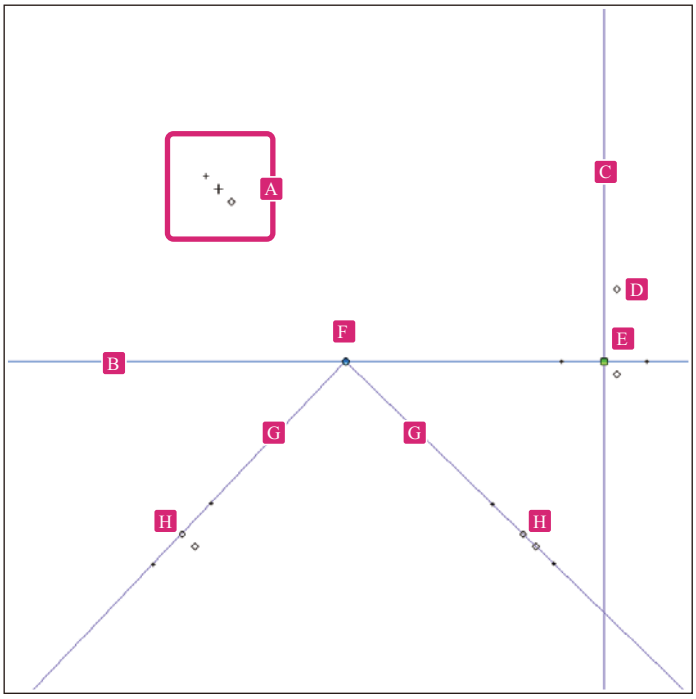




Names and Functions of Parts of a Perspective Ruler

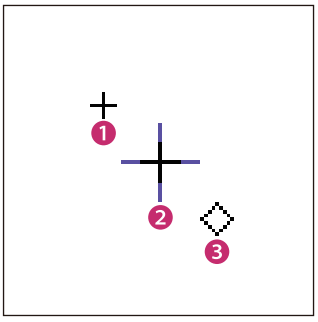
This section describes the names and functions of each part when a perspective ruler is selected from the [Object] sub tool.

Memo **The descriptions below are based on the case of a one-point perspective as an example.**



A. Whole perspective ruler Handle

Allows you to move the whole perspective ruler or switch the snap point.



(1) Move [Whole perspective ruler handle]

Dragging (1) moves the [Whole perspective ruler handle].

(2) Move perspective ruler

Dragging (2) moves the whole perspective ruler.

(3) Switch snap to perspective ruler

Switches the perspective ruler to snap to. When snap to perspective ruler is turned on, you can draw snapped to a perspective ruler.

B. Eye level

A line that represents the height at which the line of vision or camera is located. A horizontal vanishing point is placed at the eye level.

C. Line Orthogonal to Eye Level

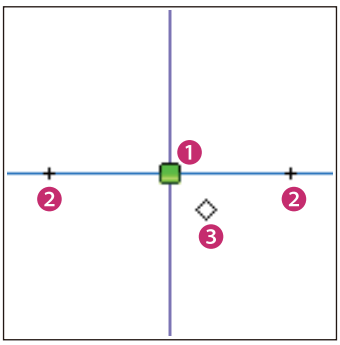
An auxiliary line orthogonal to the eye level. This line is displayed for [1 point perspective] and [2 points perspective].

D. Handle for Line Orthogonal to Eye Level

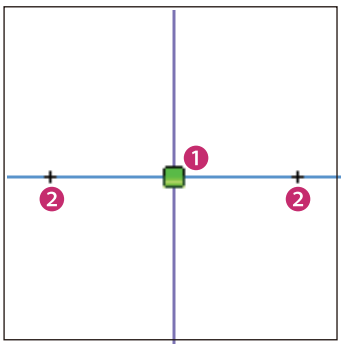
When snap to perspective ruler is turned on, allows you to draw orthogonally to the eye level.

E. Eye level Handle

Allows for moving and rotating the eye level.



One-point perspective



Two-/Three-point perspective

(1) Move eye level

Dragging (1) moves the eye level.

(2) Rotate eye level

Dragging (2) rotates the eye level.

(3) Switch snap to eye level (One-point perspective)

Switches the snap point to the eye level. When snap to perspective ruler is turned on, you can draw snapped to the eye level. This item is displayed only for [1 point perspective].

F. Vanishing Point

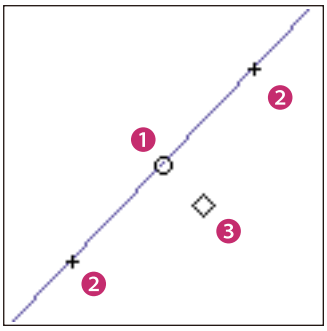
Reference point of a perspective drawing.

G. Guides

Lines spreading out from the vanishing point you can refer to when drawing with a ruler.

H. Guide/Vanishing point Handle

Allows you to operate the guides or the vanishing point.



(1) Move guide

Dragging (1) moves only the guide. The vanishing point does not move.

(2) Move vanishing point

Dragging (2) changes the direction of the guide and the vanishing point moves in that direction.

(3) Switch snap to vanishing point

Switches the snap point to the vanishing point. When snap to perspective ruler is turned on, you can draw snapped to the vanishing point of this guide.

Creating a Perspective Ruler

To create a perspective ruler, proceed as follows.

1 Select the layer

On the [Layer] palette, select the layer where to create the ruler.

2 Select the command

Select [Layer] menu → [Perspective ruler] → [Create perspective ruler].

3 Configure the perspective ruler

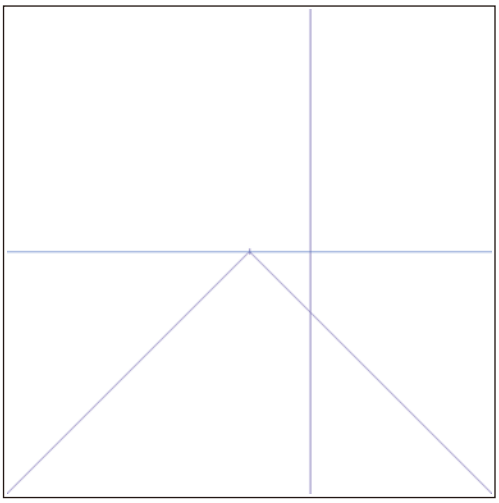
The [Create perspective ruler] dialog box opens. On the dialog, configure the settings of the perspective ruler to create.

(1) Configure the type of perspective ruler to create and where to create.

(2) Click [OK].

4 The perspective ruler is created

Clicking [OK] on the dialog box creates a perspective ruler as configured.



[Create perspective ruler] Dialog Box

(1) Type

Configure the type of perspective ruler to create. You can select from [1 point perspective], [2 points perspective] and [3 points perspective].

(2) Create new layer

Configure where to create the perspective ruler.

When turned on, a layer is created at the bottom of the [Layer] palette, and the ruler, created there.

When turned off, the ruler is created in the layer being edited.

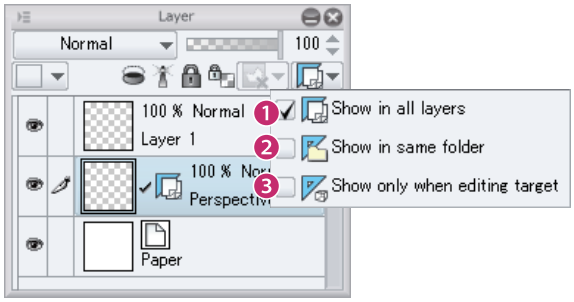
Drawing by Snapping to a Perspective Ruler

This section describes how to configure the snap range of a perspective ruler and draw by snapping to the ruler.

Configuring a Snap Range

The snap range of a perspective ruler can be configured on the [Layer] palette.

On the [Layer] palette, select the layer including the ruler for which to configure the snap range and select the range in [Set showing area of ruler].



(1) Show in all layers

The snap range extends to all [Raster] layers and [Vector] layers.

(2) Show in same folder

The snap range extends to all [Raster] layers and [Vector] layers within the same layer folder. When there is no layer folder, this becomes the same as [Show in all layers].

(3) Show only when editing target

The snap range is limited to the currently configured layer.

Snapping to a Perspective Ruler

This section describes how to snap to a perspective ruler. To configure, you must have the perspective ruler selected with the [Object] sub tool.

Memo

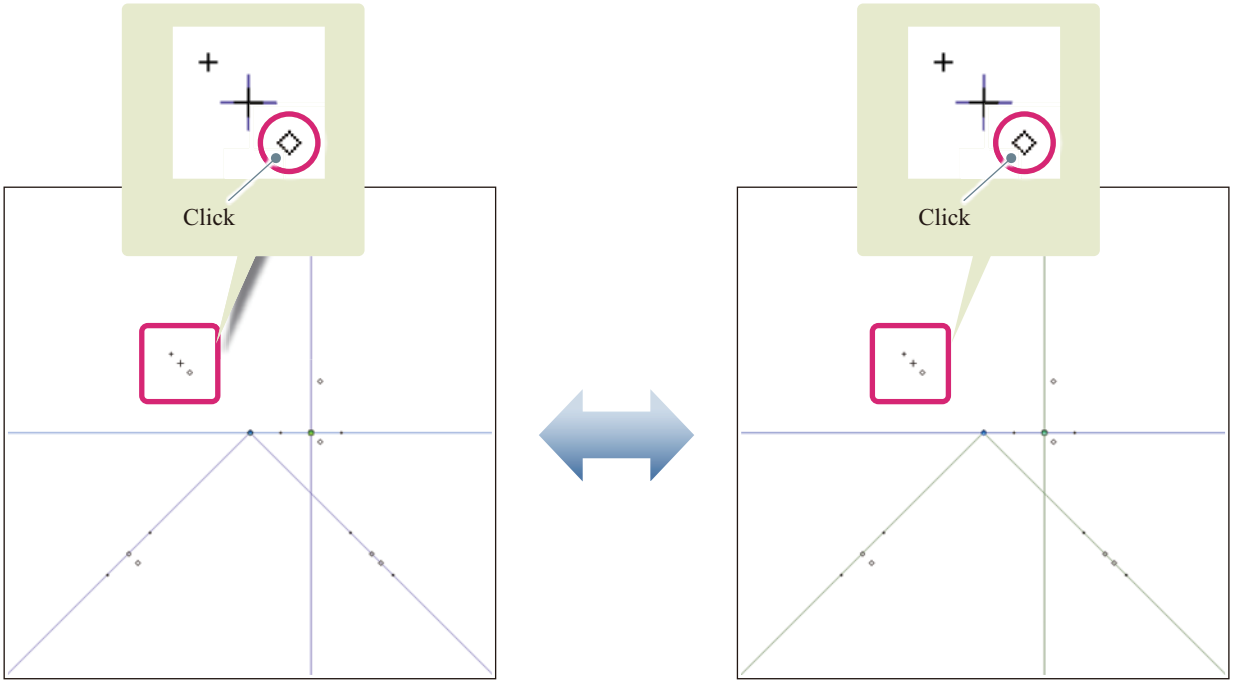
The colors used here to display the ruler when snap is turned on/off are the default colors. You can change the ruler color from [Ruler/Frame/Unit] on the [Preferences] dialog box. For details, see "Menu" → "File Menu" → "Preferences [Windows]" .

Switching the Whole Perspective Ruler Snap

Clicking the snap button on the [Whole perspective ruler handle] allows you to turn on/off the snap to the selected perspective ruler.

Memo

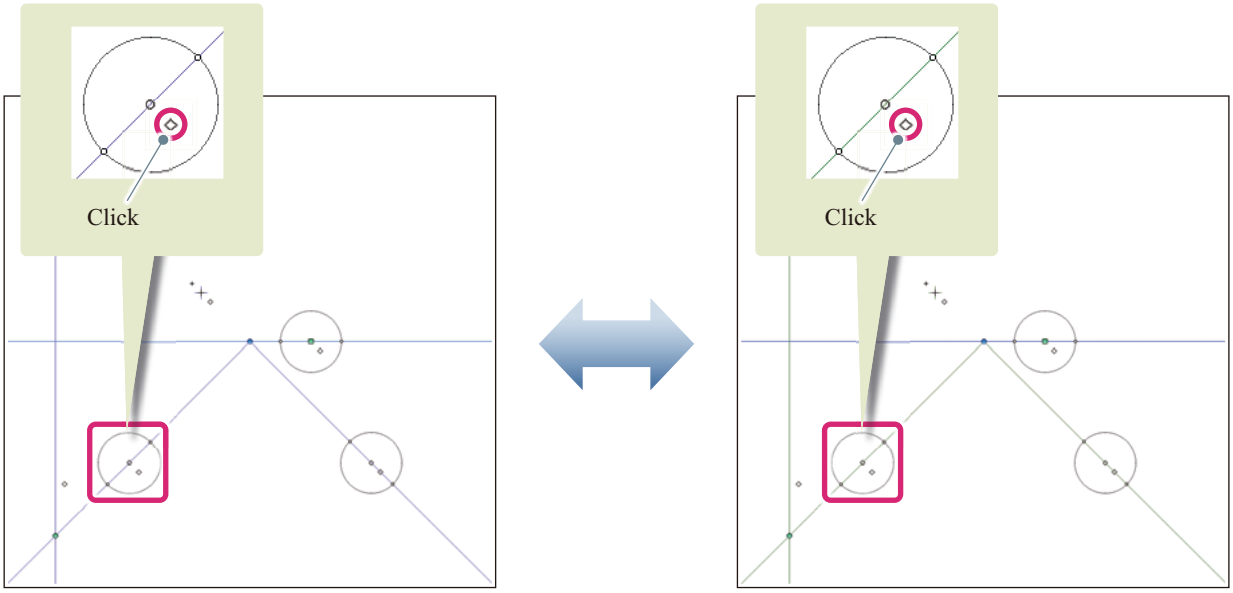
You can also switch the snap to the whole ruler by turning on/off [Snap] on the [Tool property] palette with the perspective ruler selected using the [Object] sub tool.



Guides	Violet (Snap on)	Green (Snap off)
Orthogonal line to eye level	Violet (Snap on)	Green (Snap off)
Eye level	Light blue (Snap on)	Blue (Snap off)

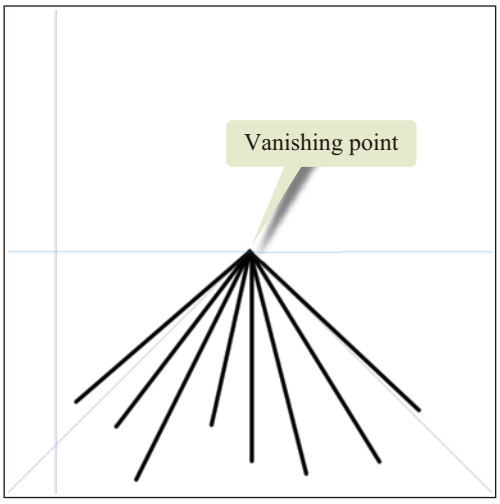
Snapping to the Vanishing Point

Clicking the snap button on the [Guide/Vanishing point handle] allows you to turn on/off the snap to the vanishing point.



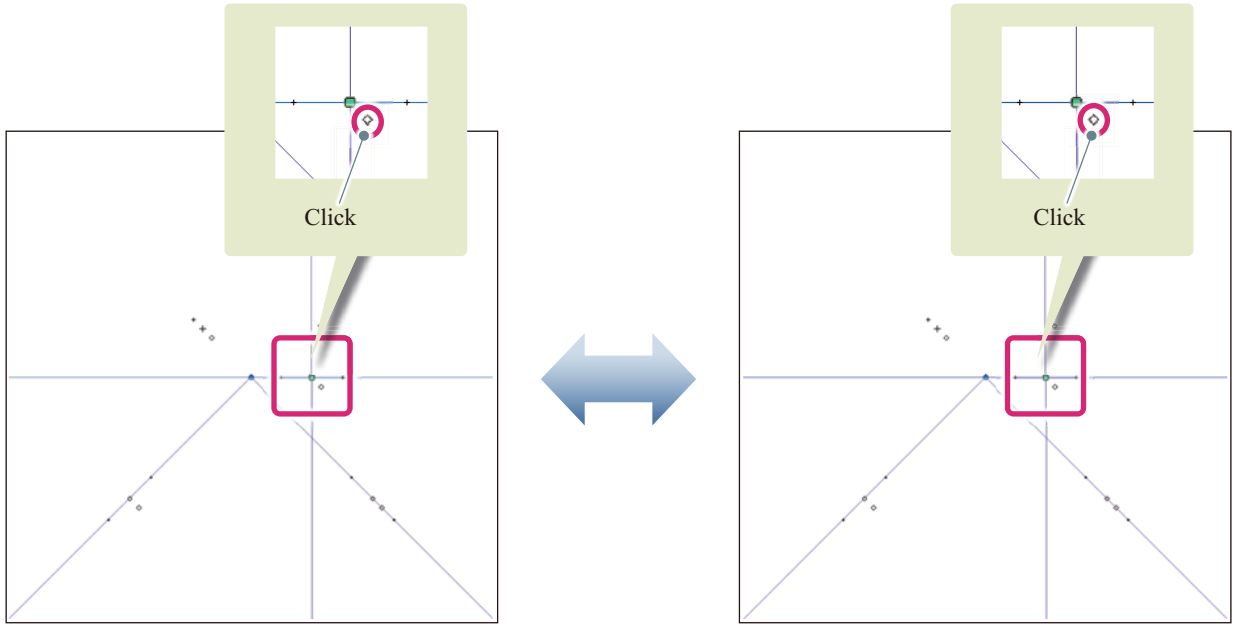
Guides	Violet (Snap on)	Green (Snap off)

Turning on the snap allows you to draw lines converging on the vanishing point of the perspective lines.



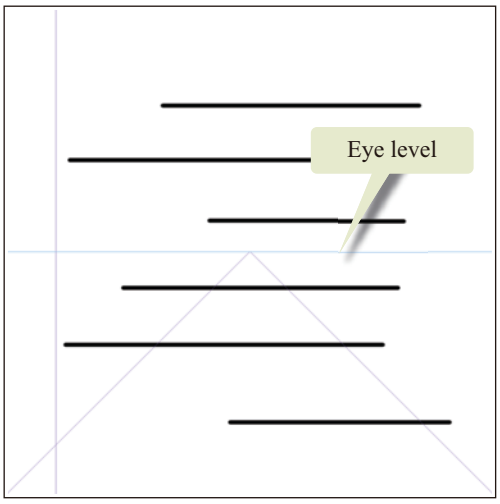
Snapping to the Eye Level Direction (Only for One-point Perspective)

Clicking the snap button on the [Eye level handle] allows you to turn on/off the snap to the eye level direction. This snap button is displayed only for [1 point perspective].



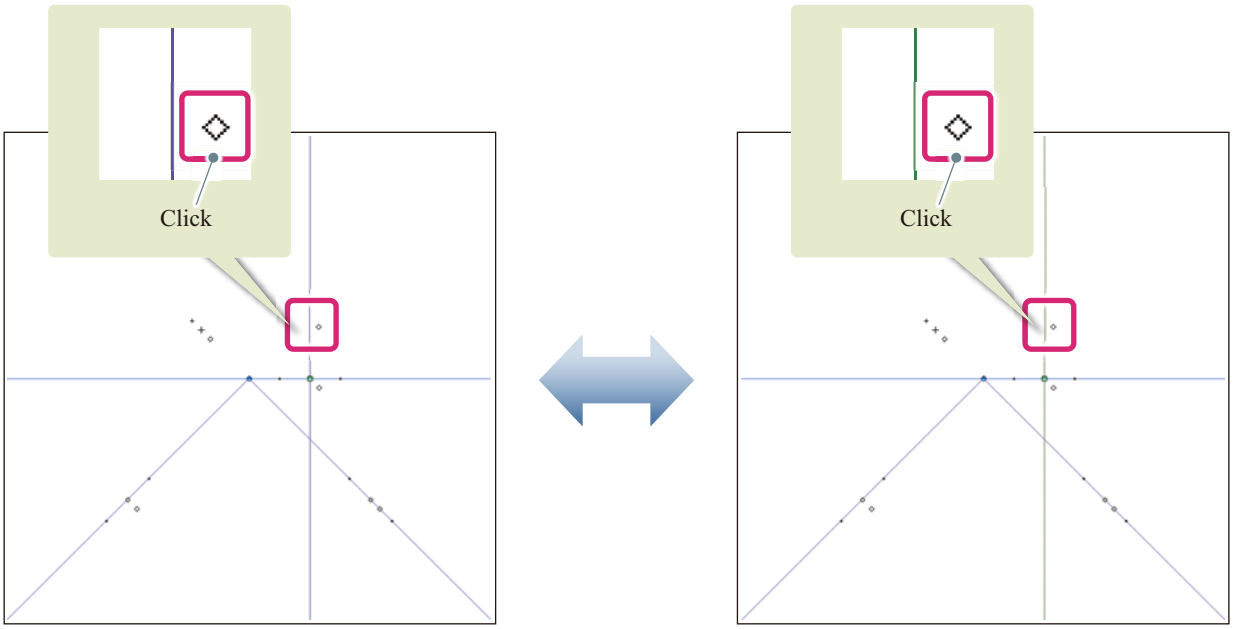
Eye level	Light blue (Snap on)	Blue (Snap off)

Turning on the snap allows you to draw snapped to the eye level direction even when drawing in [1 point perspective].



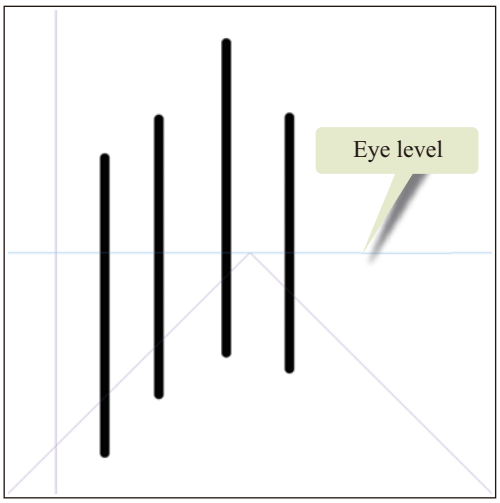
Snapping to the Line Orthogonal to the Eye Level (Only for One-point and Two-point Perspectives)

For [1 point perspective] and [2 points perspective], an orthogonal line to the eye level is displayed. Clicking the snap button on this line allows you to turn on/off the snap to the direction orthogonal to the eye level.



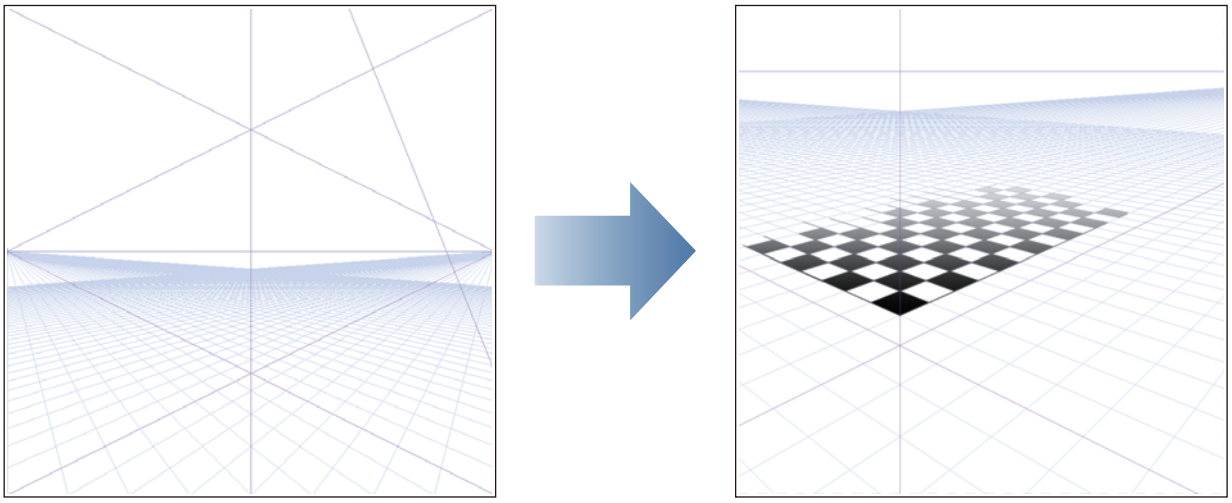
Orthogonal line to eye level	Violet (Snap on)	Green (Snap off)

Turning on the snap allows you to draw snapped to the orthogonal direction to eye level even when drawing in [1 point perspective] or [2 points perspective].



Displaying and Snapping to Grid

You can display equally-spaced grids from the vanishing point and snap to those grids for drawing.



Memo

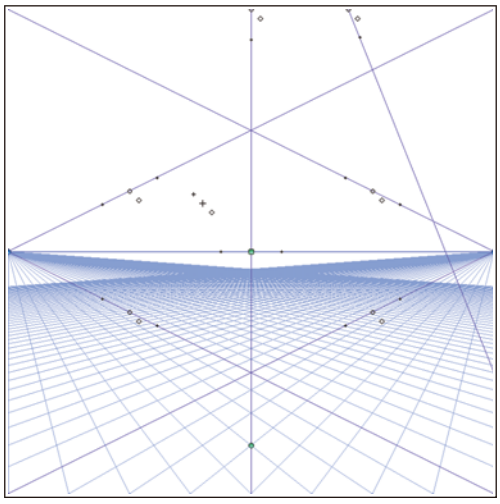
You can use this feature to draw at regular intervals in a 3D space created using a perspective ruler.

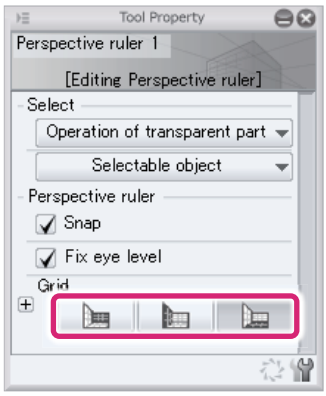
Drawing into a Grid

To draw snapped to a grid, proceed as follows.

1 Show the grid

With the perspective ruler selected, click the [Grid] button on the [Tool property] palette. The [Grid] displays.



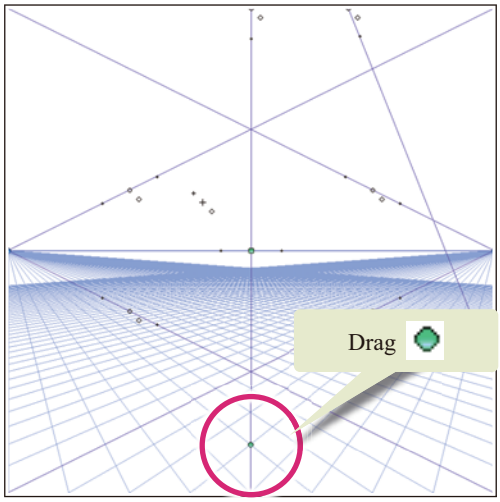


Memo

For details on the [Grid], see "Grid-related Settings on the Tool Property" .

2 Adjust the position of the grid

Drag the [Grid origin] of the perspective ruler to adjust its position.



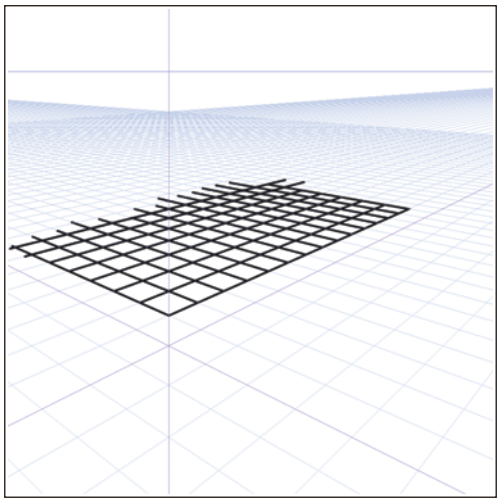
3 Enable snap

Open the [View] menu to turn on (place check mark to) [Snap to special ruler] and [Snap to grid].

Memo **If only [Snap to grid] is turned on, you will not be able to snap in an area without grid.**

4 Draw in the grid

Dragging a drawing-type tool on the canvas allows you to draw snapped to the grid.



Grid-related Settings on the Tool Property

When perspective ruler is selected on the [Object] sub tool, using the [Tool property] palette allows you to display equally-spaced grids (auxiliary lines) from the vanishing point. Grid-related settings are as follows.

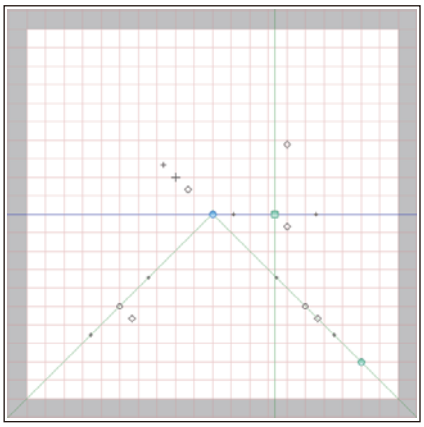
(1) Grid

Displays equally-spaced (auxiliary lines) from the vanishing point. The grid displayed by each button is different.

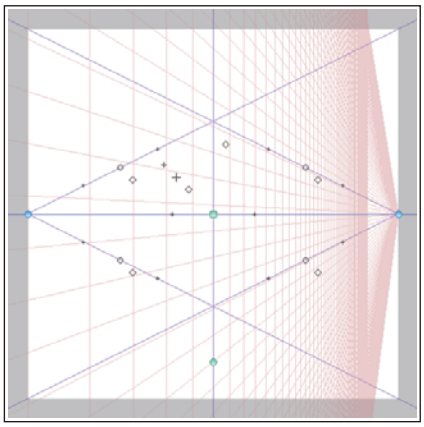
Memo

- **Grids may not display depending on where the vanishing point has been placed.**
- **To snap to the grid, turn on snap by selecting [Snap to special ruler] and [Snap to grid] from the [View] menu.**

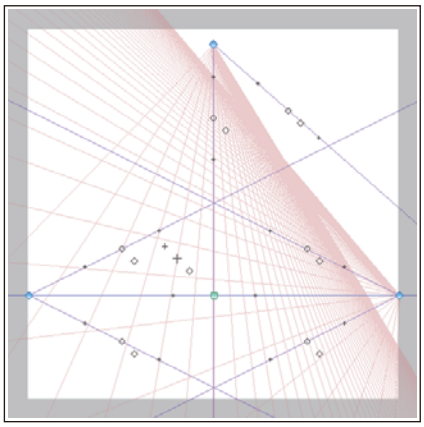
XY plane



One-point perspective

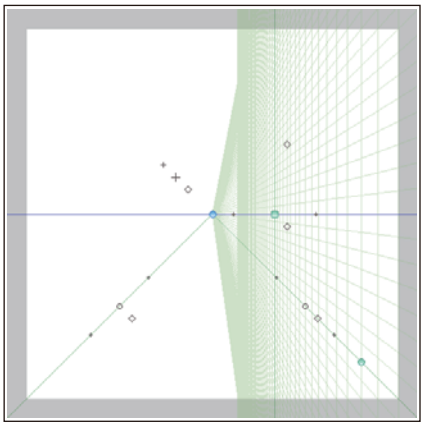


Two-point perspective

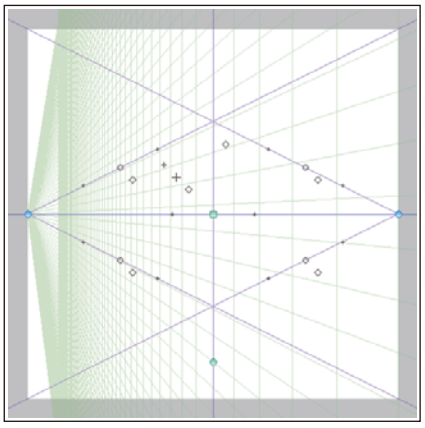


Three-point perspective

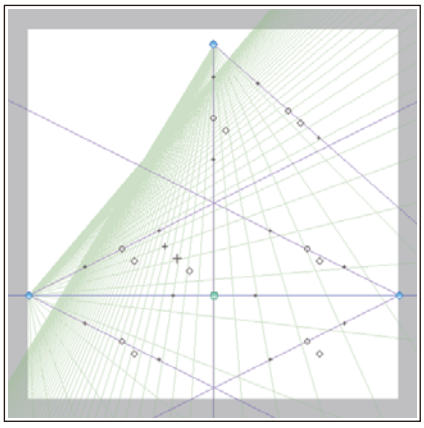
YZ plane



One-point perspective

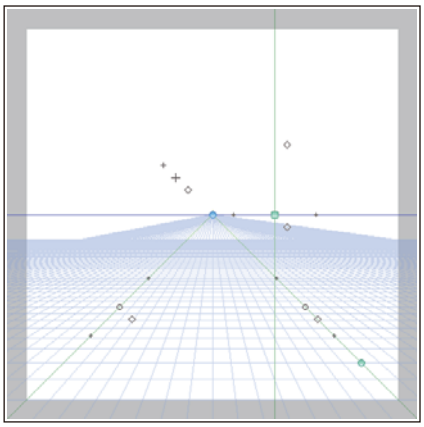


Two-point perspective

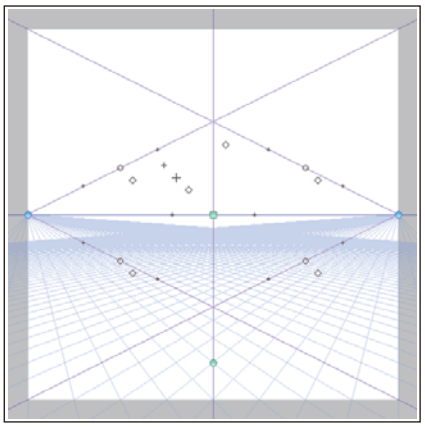


Three-point perspective

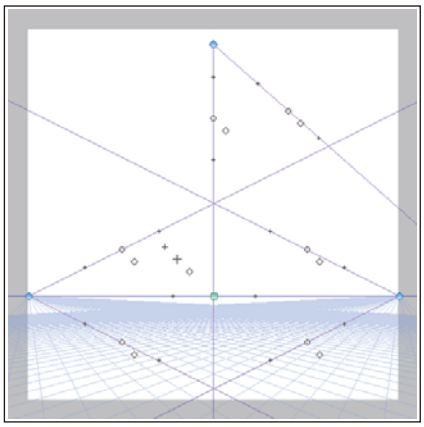
XZ plane



One-point perspective



Two-point perspective



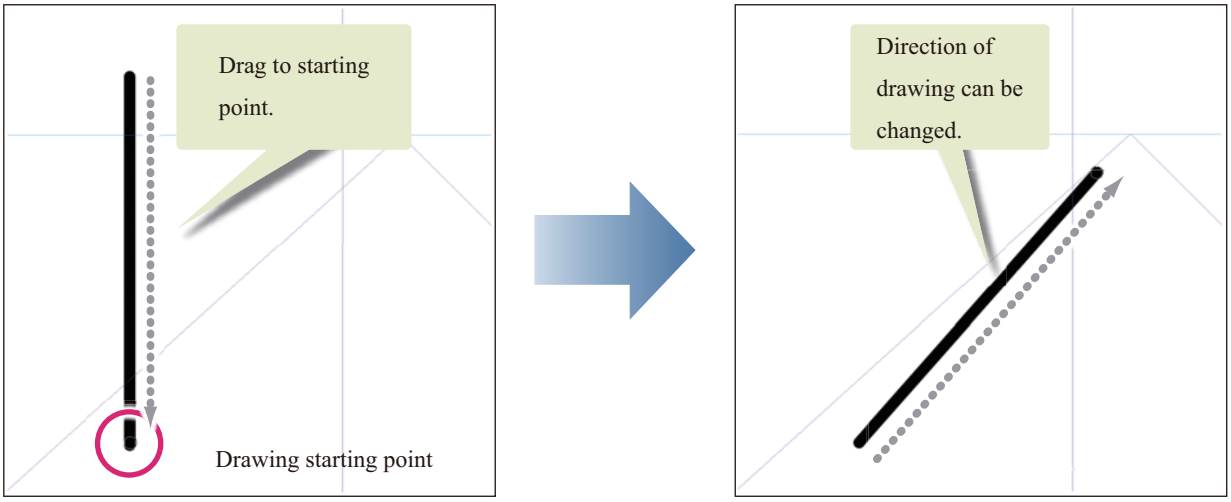
Three-point perspective

(2) Grid size

Specifies the size (distance) between grid lines. The larger the size, the wider is the area where the grid displays.

Changing the Direction while Drawing Snapped to the Perspective Ruler

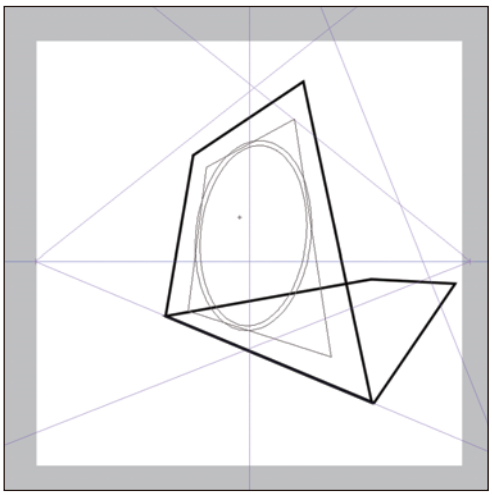
If [Decide direction again if coming back to start point while snapping perspective ruler] is turned on in [Ruler/Frame/Unit] on the [Preferences] dialog box, dragging to the starting point while drawing snapped to a perspective ruler allows you to change the drawing direction.



Memo For details on the settings, see "Menu" → "File Menu" → "Preferences [Windows]" .

Snapping to Figure, Straight Line or Polyline

[Figure], [Balloon], [Frame border], and others whose input method is figure, straight line or polyline can be drawn snapped to a perspective ruler.



Important

When drawing snapped to a perspective ruler, beware of the following points:

- **When snapping [Straight line] or [Polyline] to the grid of a perspective ruler, snap works only when the intersection of lines being drawn is along the direction of the perspective ruler. Snap does not work for intersections that are in an oblique direction.**
- **[Fix after rotation] is disabled.**
- **When drawing a figure specifying [Aspect type], [Aspect type] becomes valid only when [Specified ratio] is configured. However, [Aspect type] is disabled when snapping to an auxiliary vanishing point.**

Editing a Perspective Ruler

This section describes how to move, rotate and delete a perspective ruler as well as the procedure to fix the eye level.

Moving a Perspective Ruler

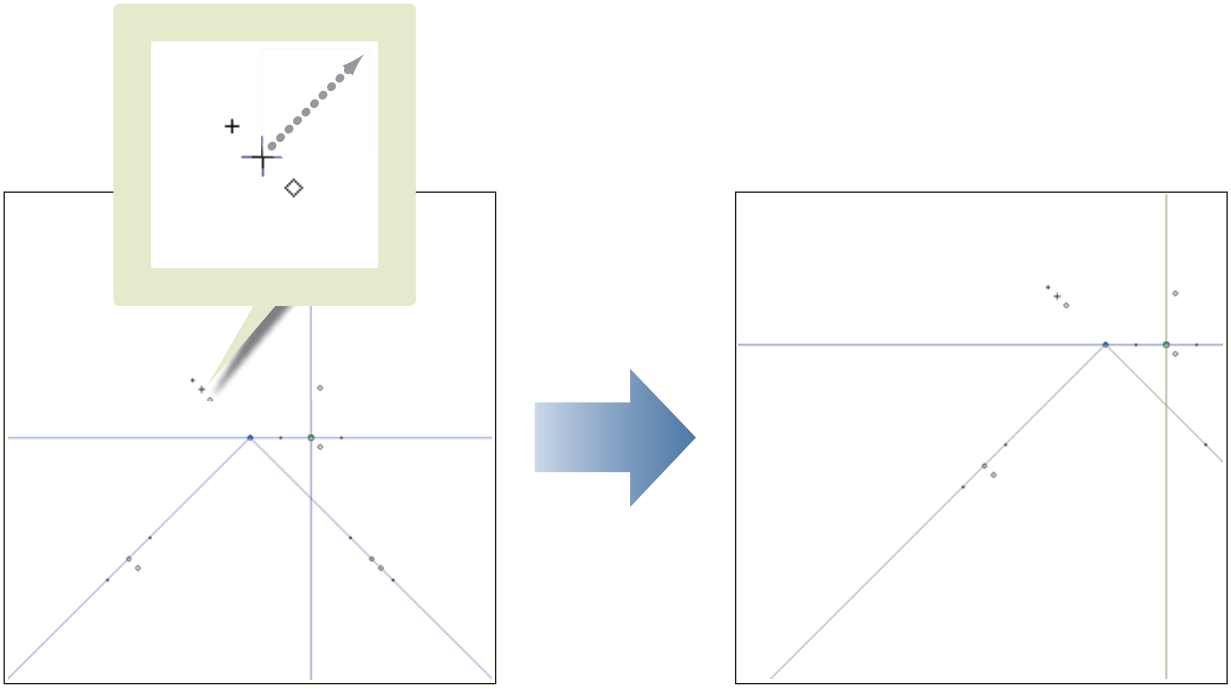
The following describes how to move the whole perspective ruler, the eye level, perspective lines and vanishing point. To move, you must have the perspective ruler selected with the [Object] sub tool.

Moving the Whole Perspective Ruler

Dragging the large cross (+) on the [Whole perspective ruler handle] moves the whole perspective ruler.

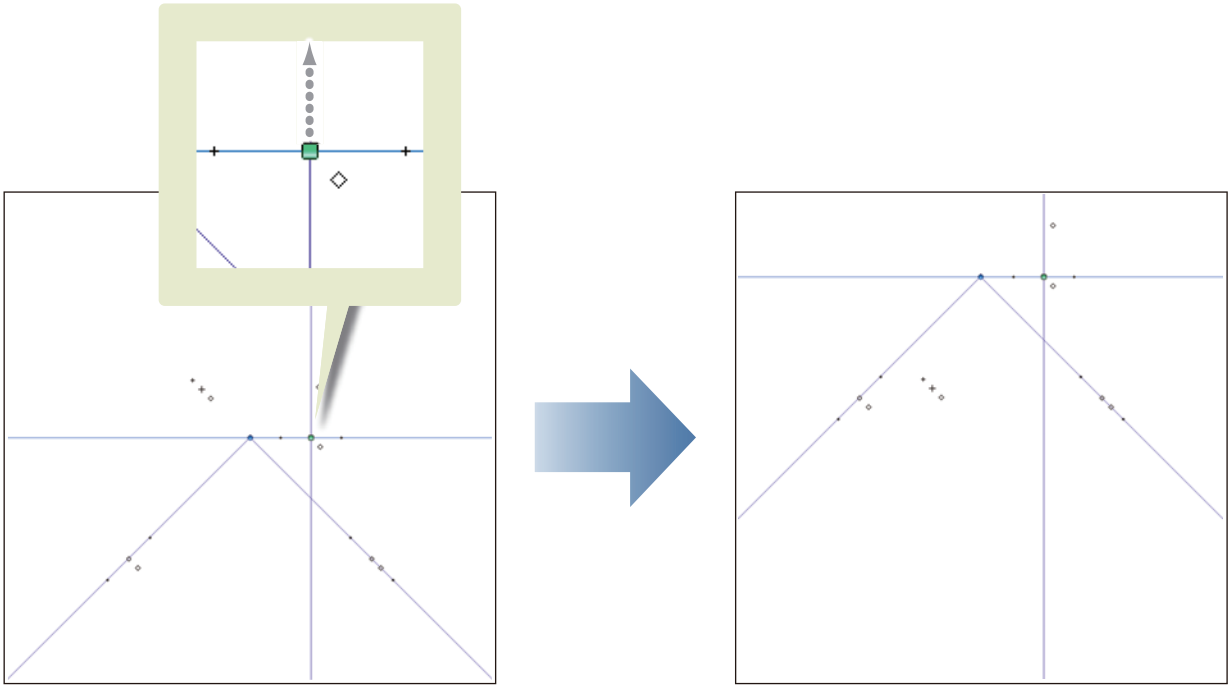
Memo

Dragging the small cross (+) moves the [Whole perspective ruler handle] itself. The perspective ruler does not move.



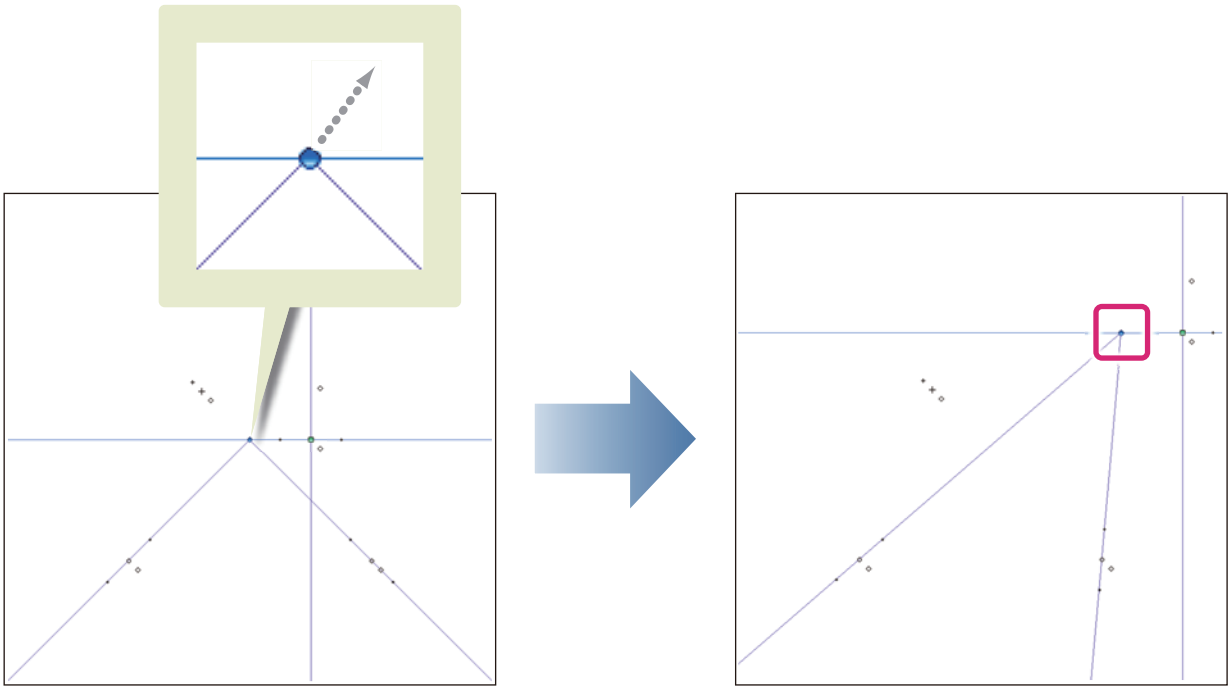
Moving the Eye Level

Dragging the light green square in the [Eye level handle] moves the eye level.



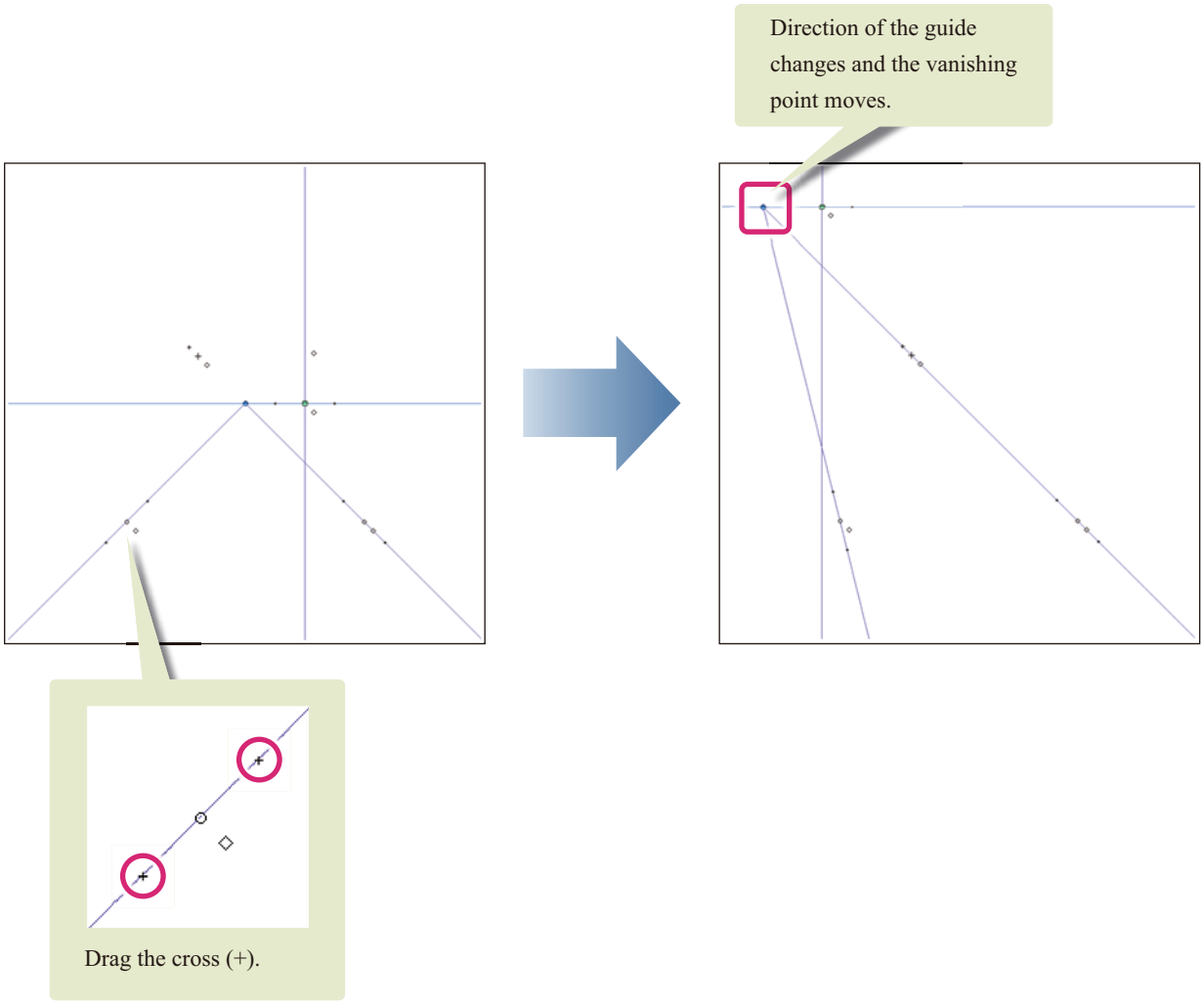
Moving the Vanishing Point

The vanishing point moves when dragged.



Rotating the Guide and Moving the Vanishing Point

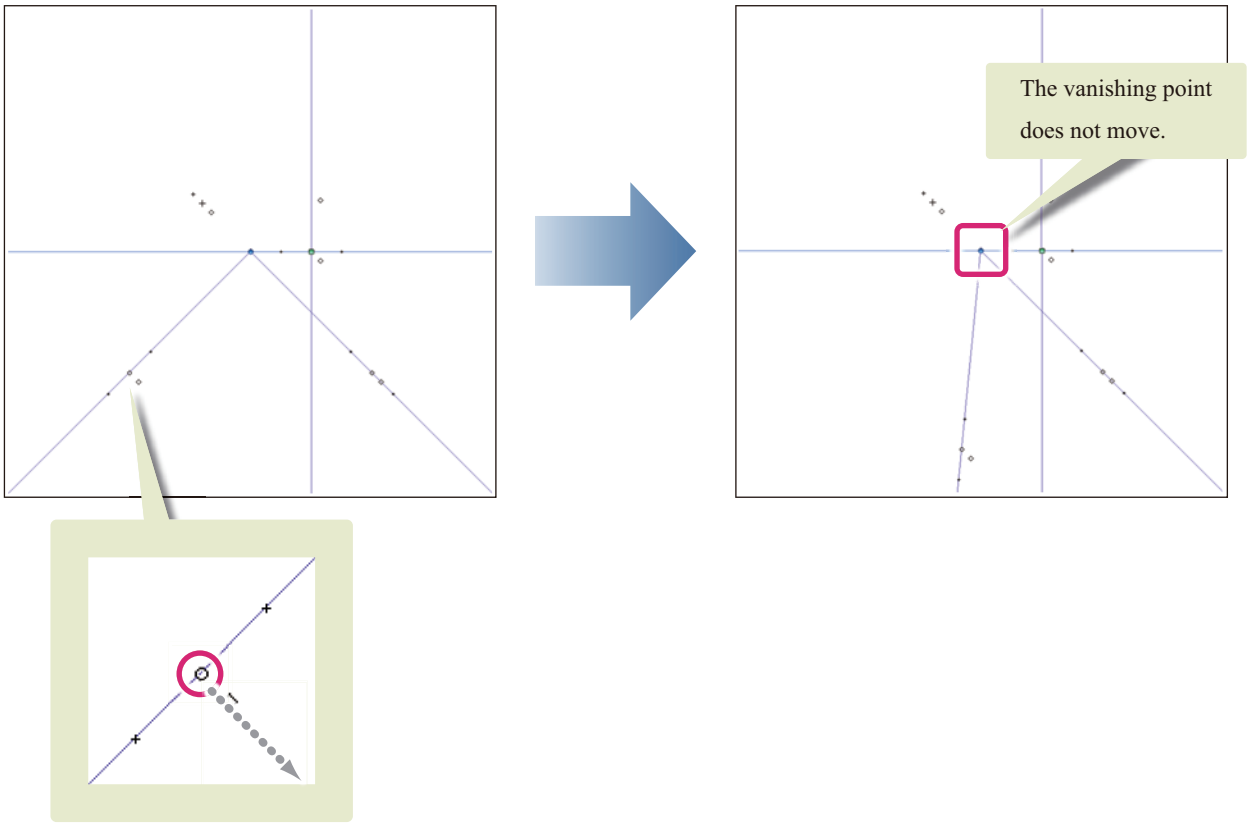
Dragging the cross (+) around the [Guide/Vanishing point handle] rotates the guide and moves the vanishing point in that direction.



Memo **Dragging while holding down the [Shift] key moves the vanishing point to infinity.**

Moving the Guide

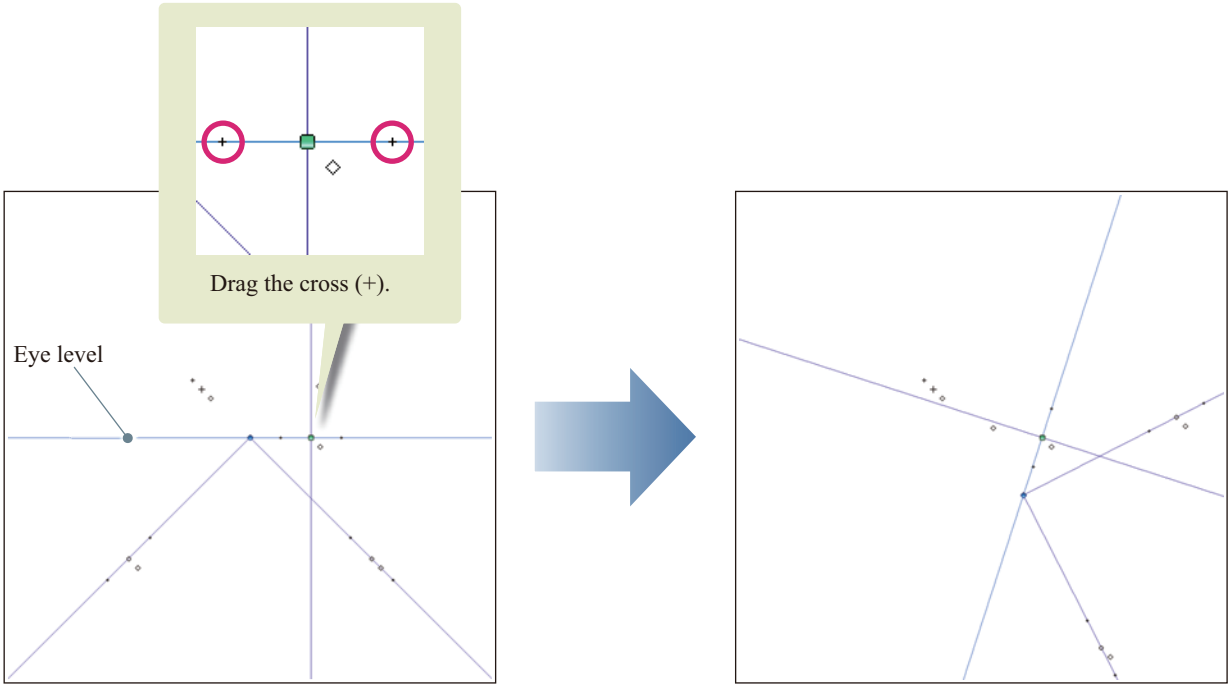
Dragging the circle (○) in the center of the [Guide/Vanishing point handle] circle moves only the guide. The vanishing point does not move.



Rotating a Perspective Ruler

To rotate a perspective ruler, you must have the perspective ruler selected with the [Object] sub tool.

Dragging the [Eye level handle] rotates the whole perspective ruler about the [Eye level handle].



Memo **Dragging while holding down the [Shift] key allows you to rotate by 45 degrees each time.**

Deleting a Perspective Ruler

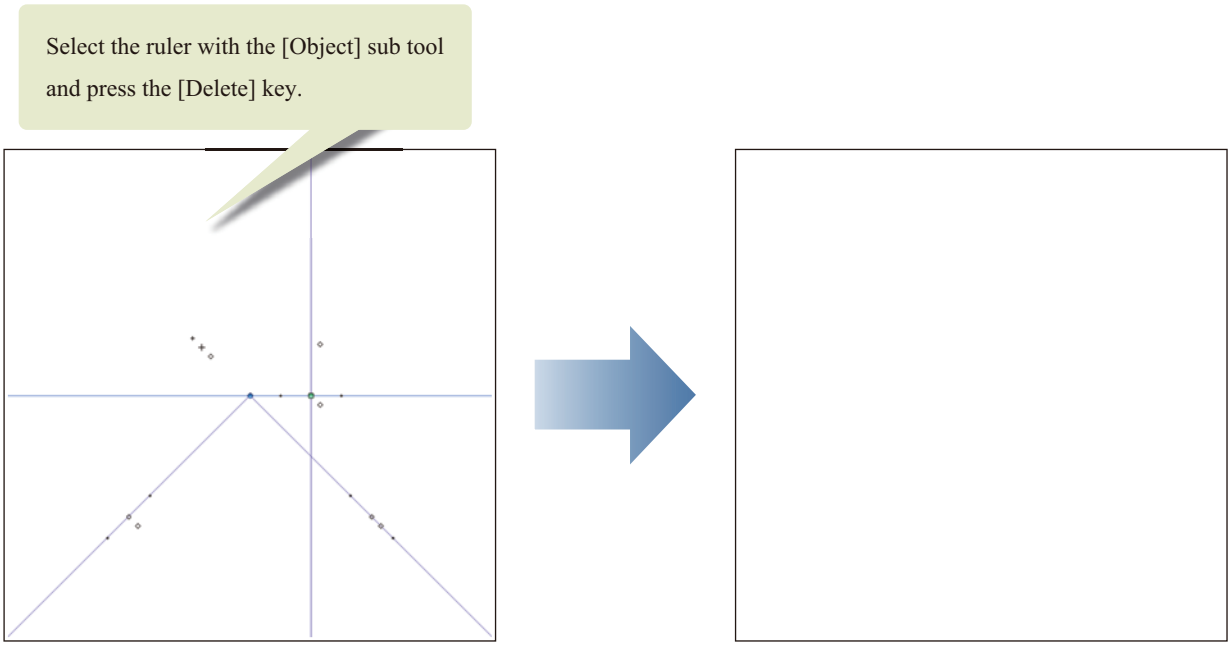
A perspective ruler can be deleted from the [Layer] palette, or by using the [Delete] key.

Deleting with the [Layer] palette

Selecting the icon of the perspective ruler on the [Layer] palette and dragging it to [Delete layer] deletes the perspective ruler.

Deleting with the [Delete] key

Selecting the perspective ruler with the [Object] sub tool and pressing the [Delete] key deletes the perspective ruler.



Adding/Deleting a Vanishing Point

The [Perspective ruler] sub tool of the [Ruler] tool allows you to add or delete a vanishing point.

Adding a Vanishing Point

To add a vanishing point, select the [Perspective ruler] sub tool and configure [Add vanishing point] for [Content of process] on the [Tool property] palette. Beware that for [1 point perspective] rulers and [2 points perspective] rulers, the result may differ depending on the [Change perspective drawing method] setting on the [Tool property] palette.

Memo

The [Change perspective drawing method] setting has no effect on [3 points perspective] rulers. The auxiliary vanishing point will be added at the intersection of the guides.

When Change perspective drawing method is OFF

When [Change perspective drawing method] is turned off, allows you to add an auxiliary vanishing point without changing the perspective drawing method.

1 Select the sub tool

Select the [Ruler] tool and select [Perspective ruler] from the [Sub tool] palette.

2 Configure the tool property

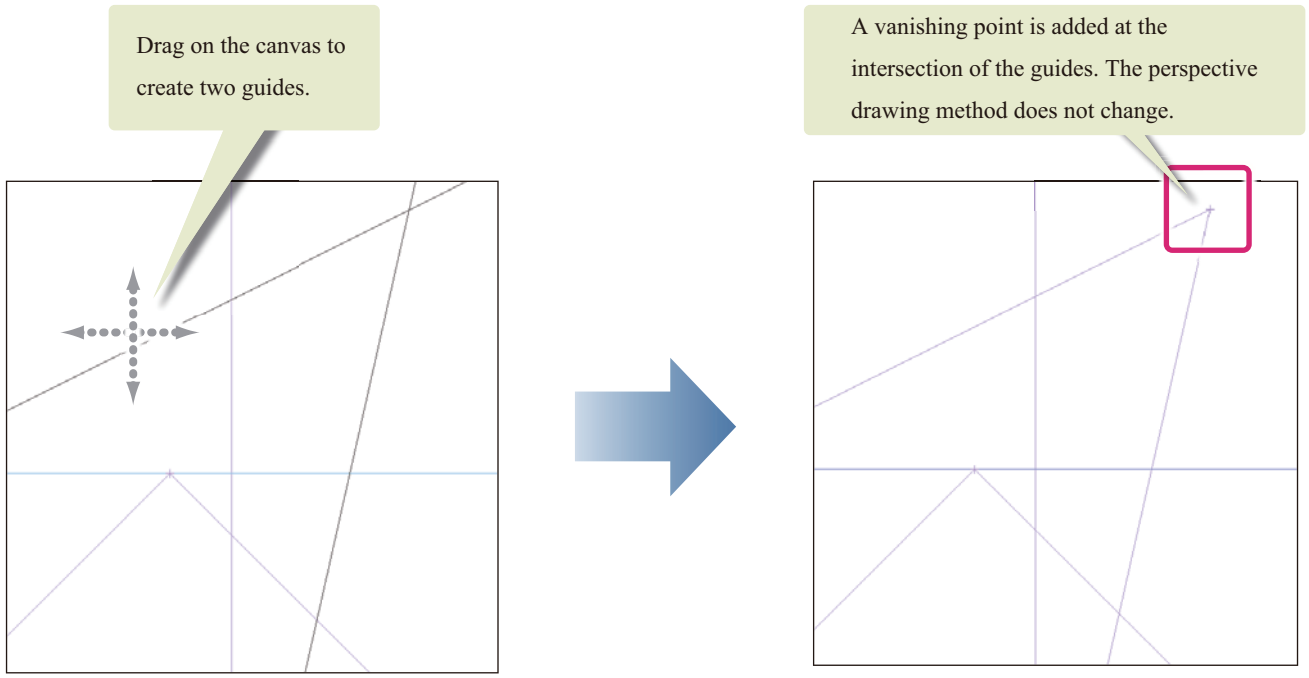
Configure the [Tool property] palette as follows.

(1) Configure [Add vanishing point] for [Content of process].

(2) Turn off [Change perspective drawing method].

3 Add the vanishing point

Drag on the canvas and create two guides. An auxiliary vanishing point is added at the intersection of the guides. The perspective drawing method does not change.


Drag on the canvas to create two guides.
A vanishing point is added at the intersection of the guides. The perspective drawing method does not change.

When Change perspective drawing method is ON

When [Change perspective drawing method] on the [Tool property] palette is turned on, adding a vanishing point to a [1 point perspective] or [2 points perspective] ruler also changes the perspective drawing method.

- Adding a vanishing point to a one-point perspective ruler changes the ruler to a two-point perspective ruler.
- Adding a vanishing point to a two-point perspective ruler changes the ruler to a three-point perspective ruler.

1 Select the sub tool

Select the [Ruler] tool and select [Perspective ruler] from the [Sub tool] palette.

2 Configure the tool property

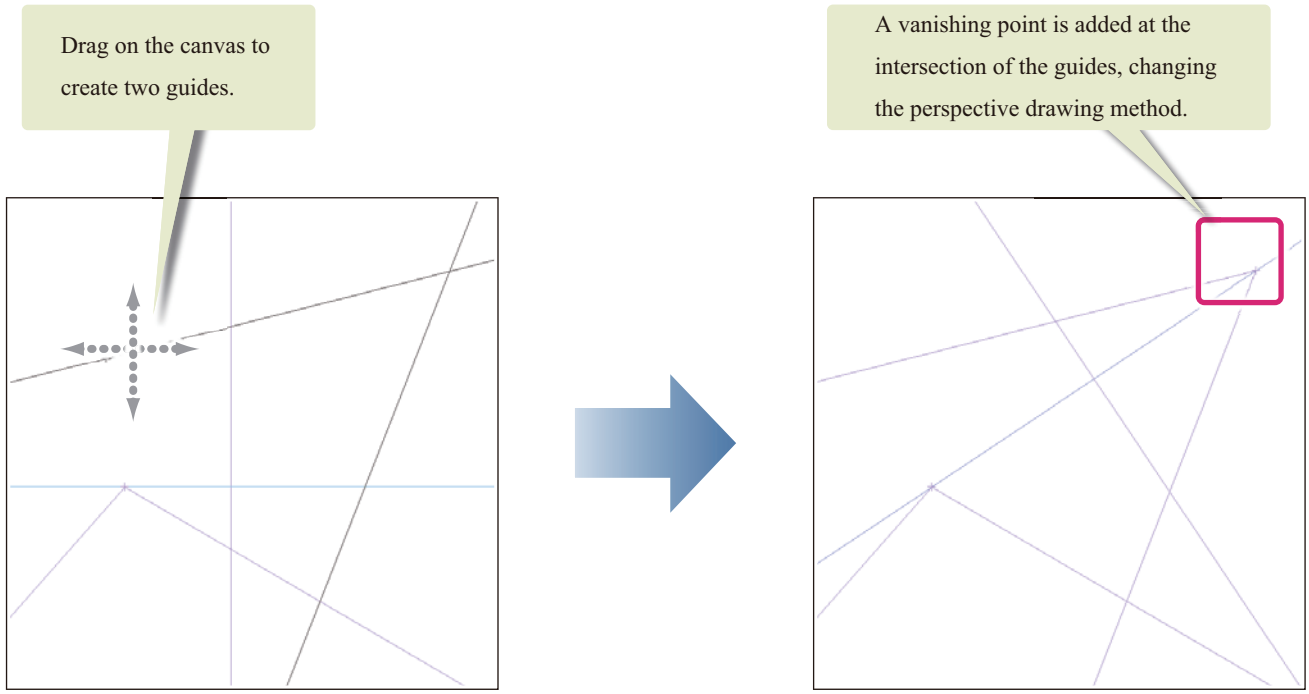
Configure the [Tool property] palette as follows.

(1) Configure [Add vanishing point] for [Content of process].

(2) Turn on [Change perspective drawing method].

3 Add the vanishing point

Drag on the canvas and create two guides. A vanishing point is added at the intersection of the guides, and the perspective drawing method, changed.


Drag on the canvas to create two guides.
A vanishing point is added at the intersection of the guides, changing the perspective drawing method.

Deleting a Vanishing Point

To delete a vanishing point, select the [Perspective ruler] sub tool and configure [Delete vanishing point] for [Content of process] on the [Tool property] palette.

1 Select the sub tool

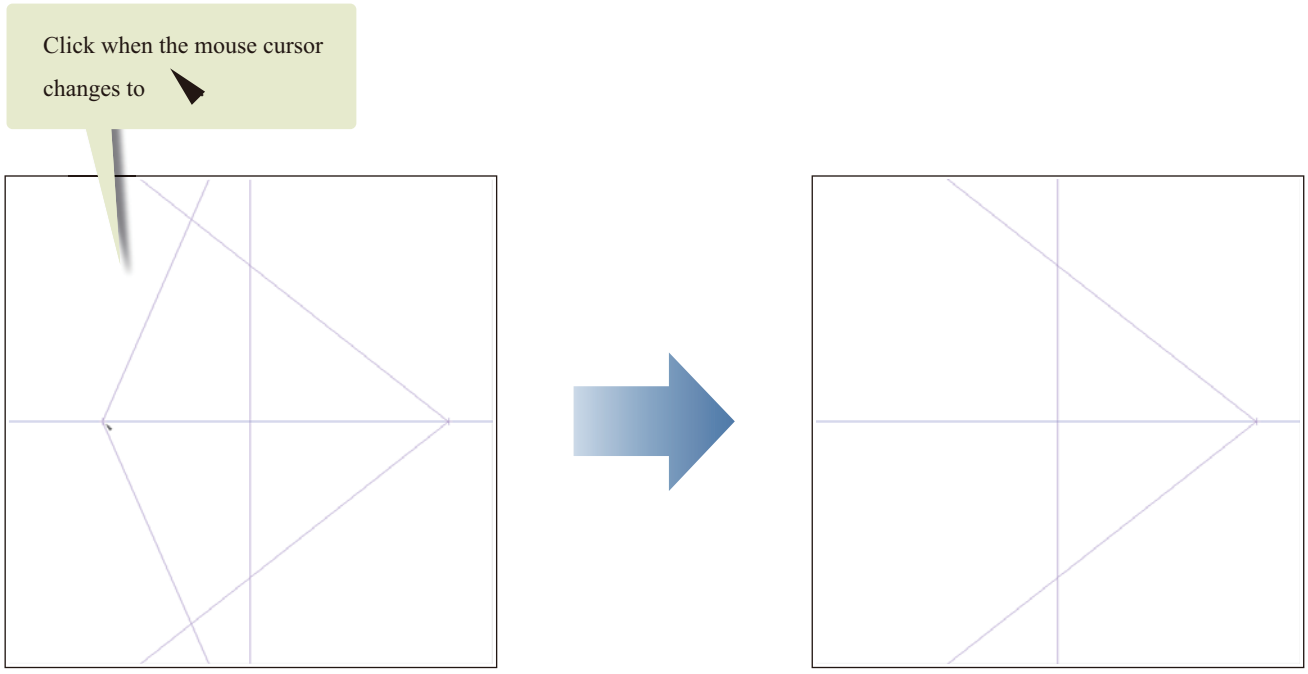
Select the [Ruler] tool and select [Perspective ruler] from the [Sub tool] palette.

2 Configure the tool property

On the [Tool property] palette, configure [Delete vanishing point] for [Content of process].

3 Delete the vanishing point

Click the vanishing point or a guide converging on the vanishing point. The vanishing point is deleted.



Fixing a Vanishing Point

The [Perspective ruler] sub tool of the [Ruler] tool allows you to fix a vanishing point.

1 Select the sub tool

Select the [Ruler] tool and select [Perspective ruler] from the [Sub tool] palette.

2 Configure the tool property

On the [Tool property] palette, configure [Fix vanishing point] for [Content of process].

3 Fix the vanishing point

Click the vanishing point or a guide converging on the vanishing point. The vanishing point is fixed.

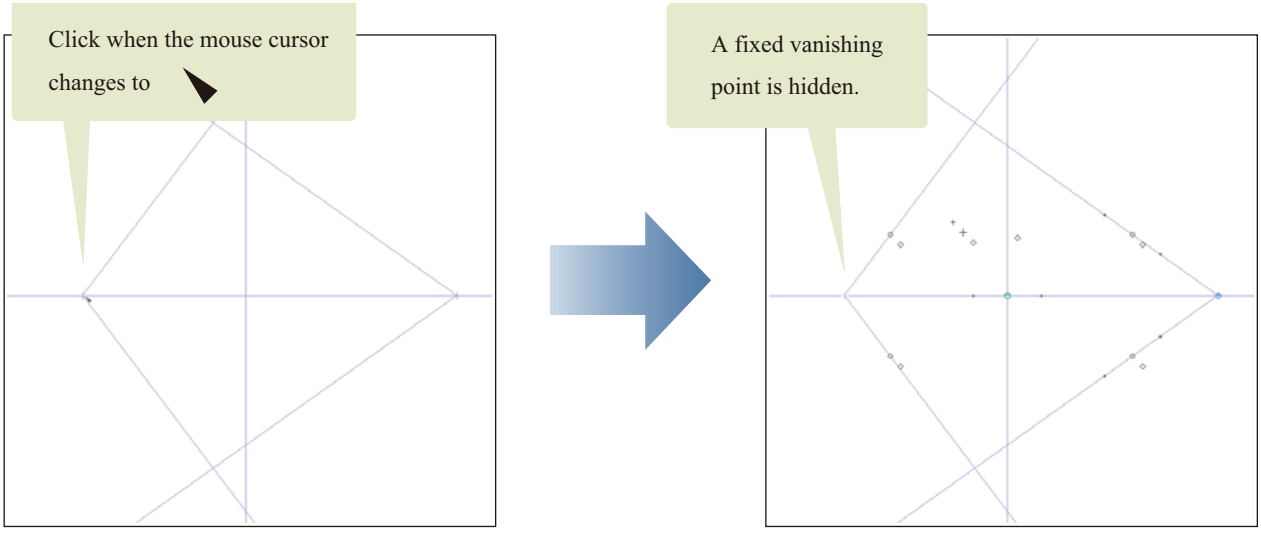


Image of perspective ruler selected with the Object tool.

Memo **To free a fixed vanishing point, click it again.**

Adding/Deleting a Guide

The [Perspective ruler] sub tool of the [Ruler] tool allows you to add or delete a guide.

Adding a Guide

To add a guide, select the [Perspective ruler] sub tool and configure [Add guide] for [Content of process] on the [Tool property] palette.

1 Select the sub tool

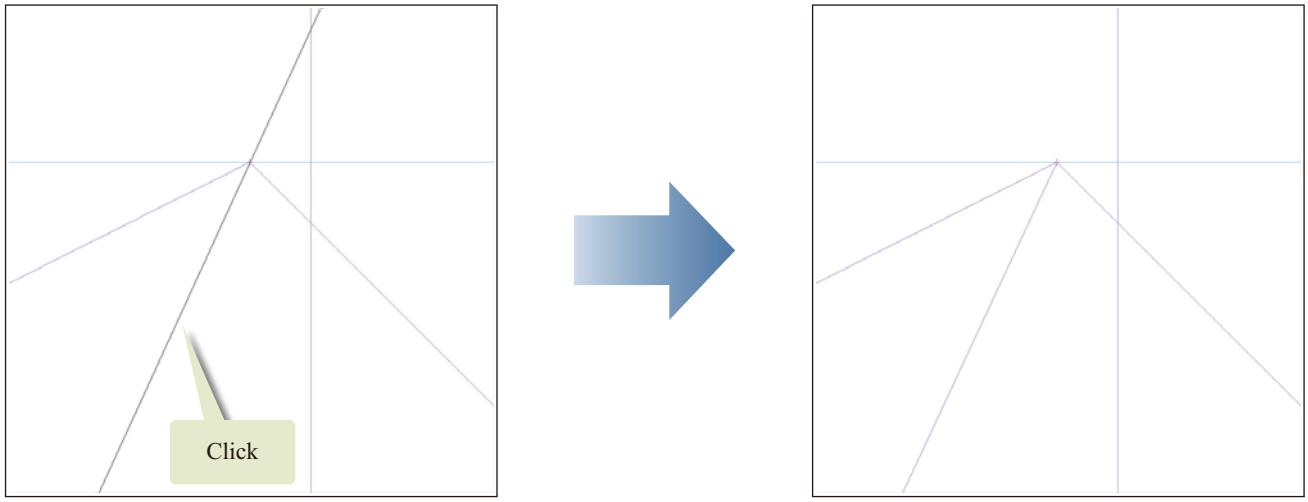
Select the [Ruler] tool and select [Perspective ruler] from the [Sub tool] palette.

2 Configure the tool property

On the [Tool property] palette, configure [Add guide] for [Content of process].

3 Add the guide

Drag on the canvas to add the guide.



Memo

Dragging on the canvas to create a guide when there are multiple vanishing points allows you to change the orientation of the guide.

Deleting a Guide

To delete a guide, select the [Perspective ruler] sub tool and configure [Delete guide] for [Content of process] on the [Tool property] palette.

1 Select the sub tool

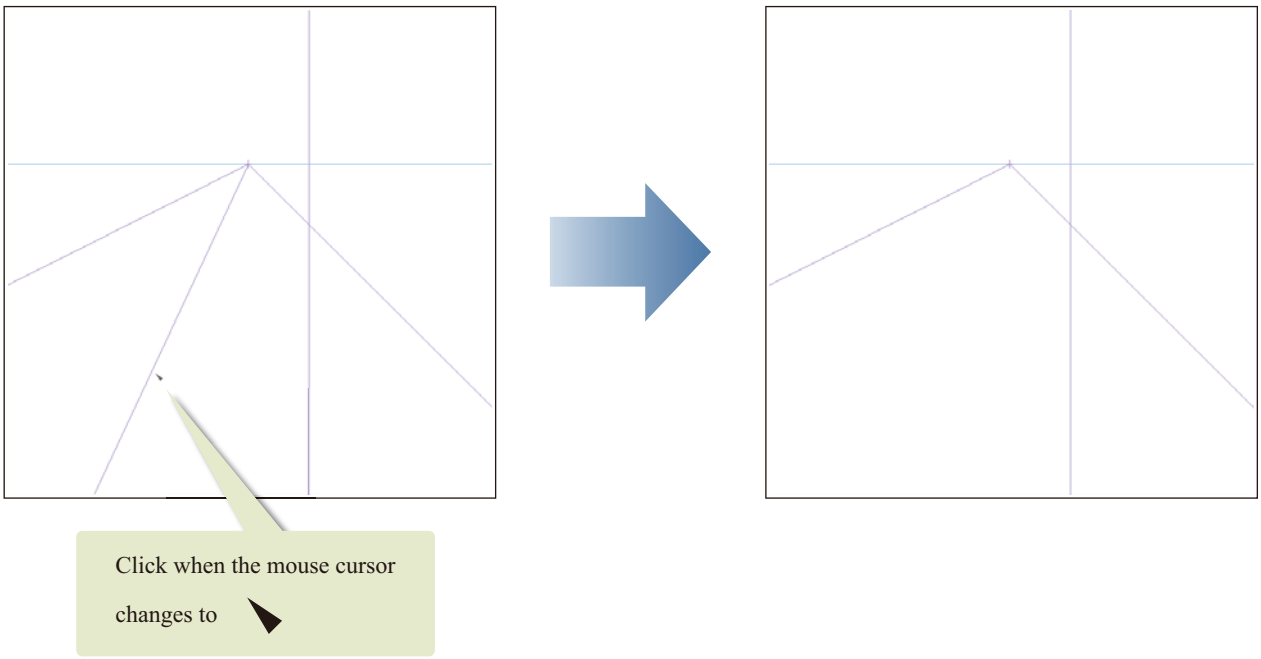
Select the [Ruler] tool and select [Perspective ruler] from the [Sub tool] palette.

2 Configure the tool property

On the [Tool property] palette, configure [Delete guide] for [Content of process].

3 Delete the guide

Click the guide to delete.



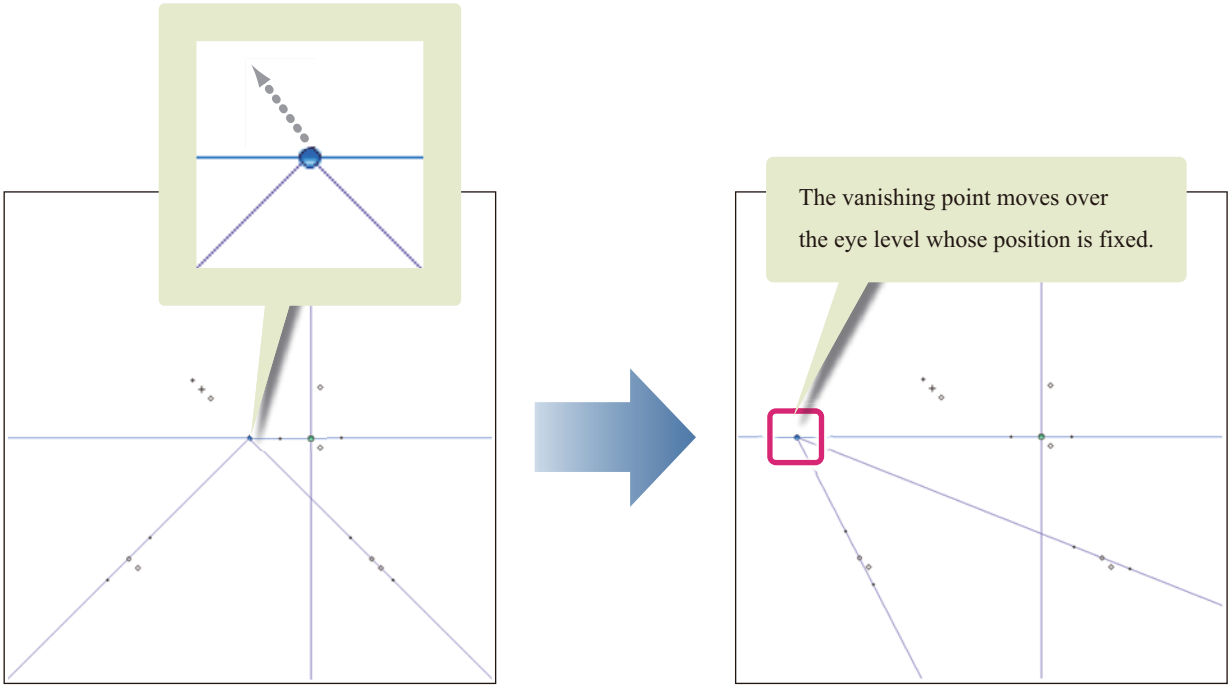
Fixing the Eye Level

Selecting the perspective ruler with the [Object] sub tool and turning on [Fix eye level] on the [Tool property] palette fixes the position of the [Eye level].

Turning on this item moves the vanishing point over the eye level as described below.

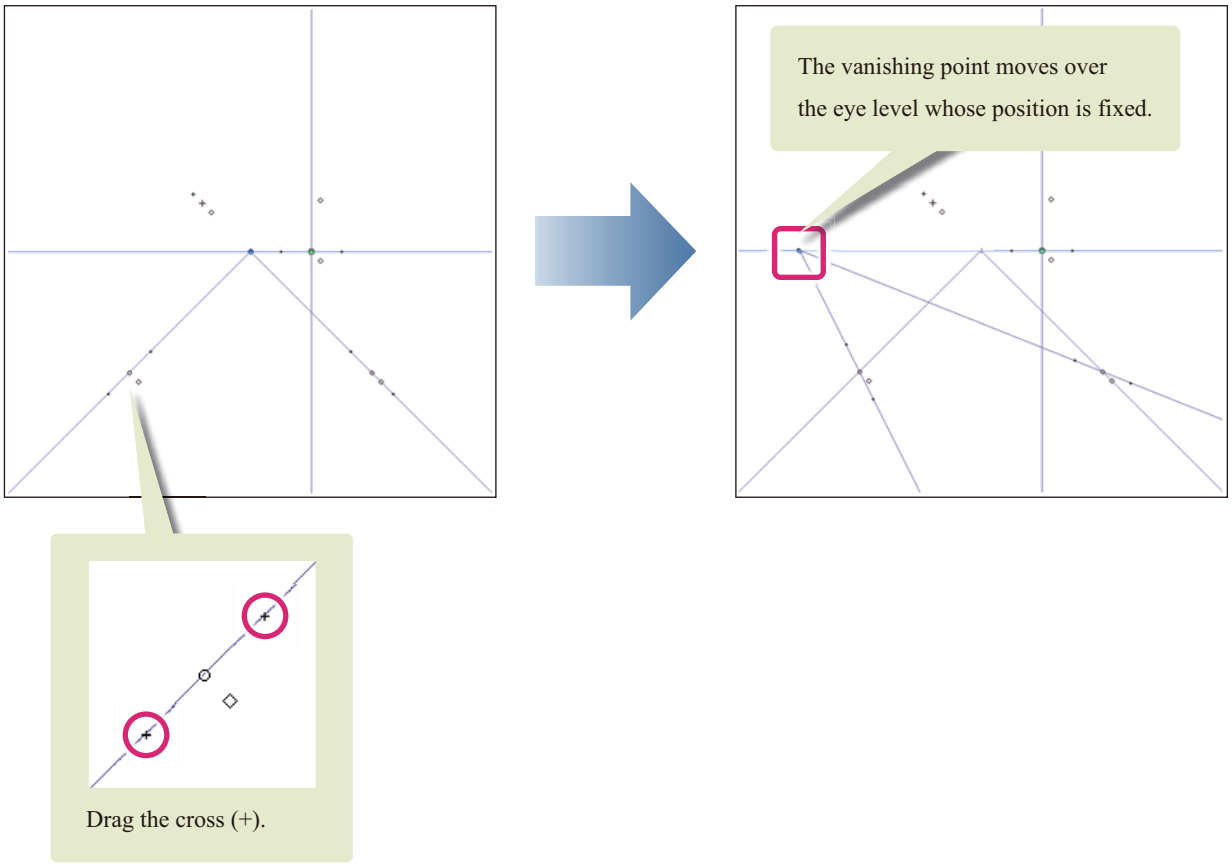
When the Vanishing Point Is Dragged over the Eye Level

The vanishing point moves over the eye level whose position has been fixed.



When the Vanishing Point Is Moved After Rotating the Guide

The vanishing point moves over the eye level whose position has been fixed.



Right-click Menu during Object Tool Use

Right clicking on a layer with a [Perspective ruler] when the [Object] sub tool of the [Operation] tool is being used shows menu items related to [Perspective ruler].

Memo **Menu items related to [Perspective ruler] displays on the right-click menu also when a [Guide] handle is selected.**

(1) Add vanishing point

Right click on the canvas and select [Add vanishing point] from the menu that displays. A vanishing point will be added at the clicked position.

(2) Delete vanishing point

Select the [Vanishing point] with the [Object] sub tool, then right click and select [Delete vanishing point] from the menu that displays. The vanishing point is deleted.

(3) Add guide

Select the [Vanishing point] with the [Object] sub tool, then right click and select [Add guide] from the menu that displays. A [Guide line] is added to the selected [Vanishing point].

Memo **A guide line can be added also when a [Handle] on the guide line is selected. However, the guide line will be added overlapped.**

(4) Delete guide

Select the [Handle] of the guide line you want to delete, then right click and select [Delete guide] from the menu that displays. The selected [Guide line] is deleted.

(5) Fix vanishing point

Select the [Vanishing point] with the [Object] sub tool, then right click and select [Fix vanishing point] from the menu that displays. The vanishing point is fixed.

(6) Infinitize

Select the [Vanishing point] with the [Object] sub tool, then right click and select [Infinitize] from the menu that displays. The vanishing point is moved to infinity.

(7) Fix eye level

Right click on the canvas and select [Fix eye level] from the menu that displays. The eye level is fixed.

(8) Horizontalize eye level

Right click on the canvas and select [Horizontalize eye level] from the menu that displays. The eye level is horizontalized.

Explanation: Creating and Editing Stream Lines and Saturated Lines *

This chapter describes how to create and edit stream lines and saturated lines.

What Are Stream Lines and Saturated Lines?

This section provides an overview of stream lines and saturated lines.

Stream line

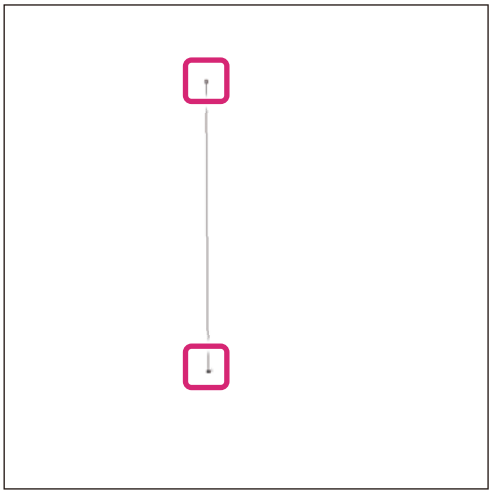
Saturated line

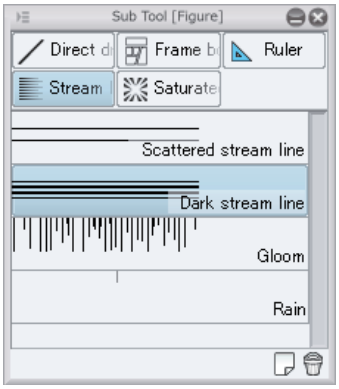
Overview of Stream Lines

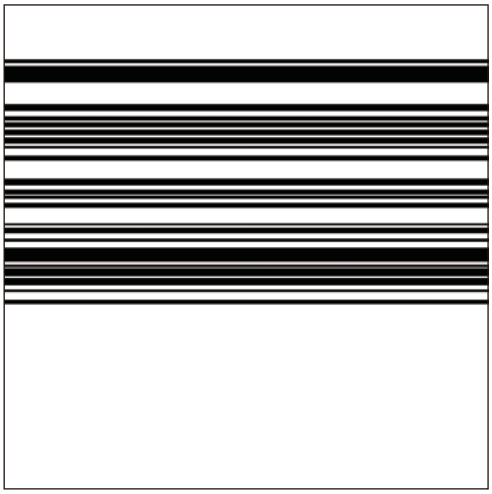
The following is an overview of stream lines.

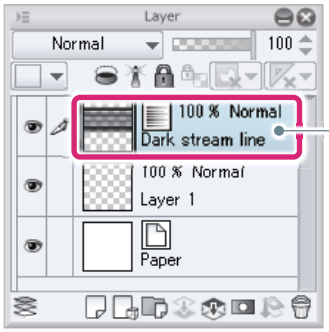
Drawing a Stream Line

Stream lines can be drawn using the [Stream line] sub tool of the [Figure] tool. Drawing a stream line creates a [Stream line] layer.







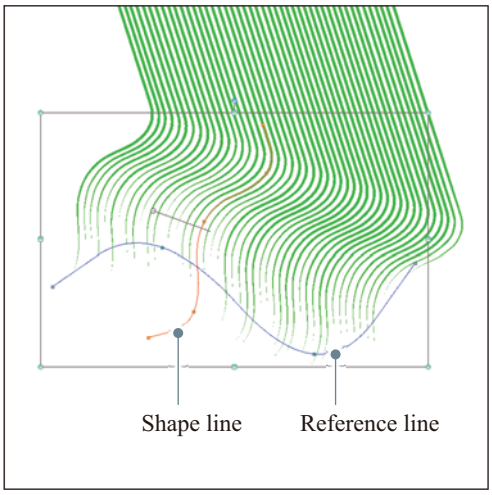


Stream line layer

Reference Line and Shape Line

Selecting the [Stream line] layer and changing the tool to [Object] sub tool displays a [Reference line] (blue line) and a [Shape line] (red line).

In Manga Studio 5.0, a stream line is drawn by lining up lines of the same shape as the [Shape line] along the [Reference line].



Reference line	A line that determines the position of the stream line. It is displayed in blue. Lines with the same shape as [Shape line] line up along this line.
Shape line	A line that determines the shape of each of the lines that comprise the stream line. It is displayed in red.

Editing a Stream Line

Selecting the [Stream line] layer and changing the tool to [Object] sub tool allows you to adjust a drawn stream line.

- To adjust the stream line, you can correct the position and shape of the [Reference line] and [Shape line]. Furthermore, you can configure the direction in which to draw lines with the same shape as the [Shape line] by dragging the [Center of rotation] of the [Shape line].
- The color, size and space between each line can be adjusted with the [Tool property] palette.

The [Reference line] can be added or redrawn even after the stream line is drawn, with the stream line settings (color, size, space between each line, and the like) and [Shape line] kept as they are. For details, see "Adding and Redrawing the Reference Line" .

Overview of Saturated Lines

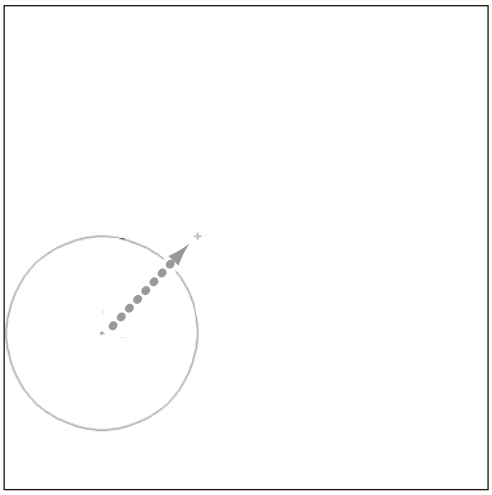
The following is an overview of saturated lines.

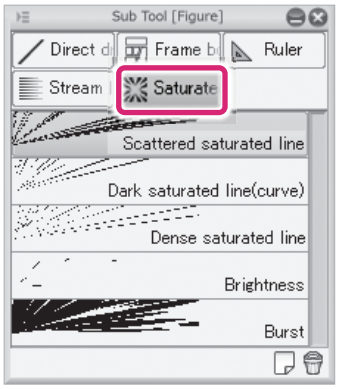
Drawing a Saturated Line

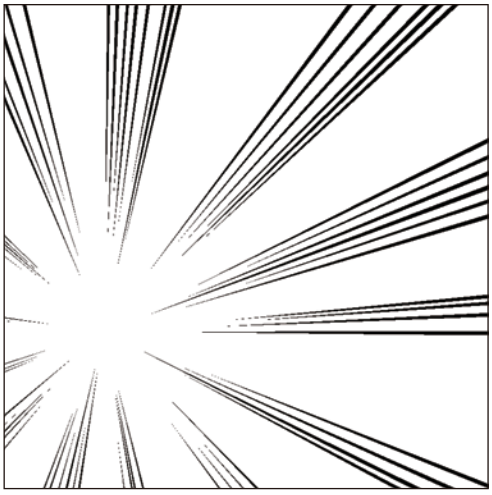
Saturated lines can be drawn using the following sub tools:

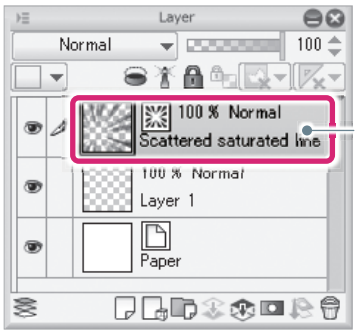
- [Saturated line] sub tool of the [Figure] tool
- [Flash] sub tool of the [Text] tool

Drawing a saturated line creates a [Saturated line] layer.







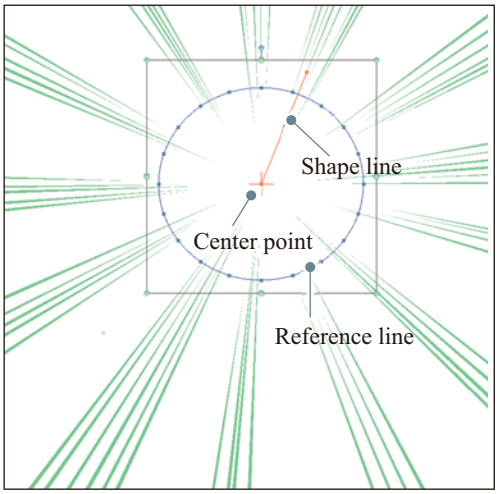


Saturated line layer

Reference Line, Shape Line, and Center Point

Selecting the [Saturated line] layer and changing the tool to [Object] sub tool displays a [Reference line] (blue line), a [Shape line] (red line) and the [Center point] (red +).

In Manga Studio 5.0, a saturated line is drawn by lining up lines of the same shape as the [Shape line] along the [Reference line], with one of the ends converging on the [Center point].



Reference line	A line that determines the position of the saturated line. It is displayed in blue. Lines with the same shape as [Shape line] line up along this line.
Shape line	A line that determines the shape of each of the lines that comprise the saturated line. It is displayed in red.
Center point	A point that determines the point of convergence. It is displayed with a red "+" sign.

Editing a Saturated Line

Selecting the [Saturated line] layer and changing the tool to [Object] sub tool allows you to adjust the saturated line drawing.

- To adjust a saturated line, you can correct the position and shape of the [Reference line] and [Shape line]. Furthermore, you can move the [Center point] and set the point of convergence.
- The color, size and space between each line can be adjusted with the [Tool property] palette.

The [Reference line] can be added or redrawn even after the saturated line is drawn, with the saturated line settings (color, size, space between each line, and the like), as well as the [Shape line] and [Center point] kept as they are. For details, see "Adding and Redrawing the Reference Line" .

Creating and Editing a Stream Line

This section describes how to create and edit a stream line.

Creating a Stream Line

To create a stream line, proceed as follows.

1 Select the tool

On the [Tool] palette, select the [Figure] tool.

2 Select the sub tool

On the [Sub tool] palette, switch the sub tool group to [Stream line] and select the [Sub tool].

3 Configure the color for the lines

With a color palette, configure a color for the stream line.

4 Configure the tool property

On the [Tool property] palette, configure the settings for the stream line to draw.

Memo

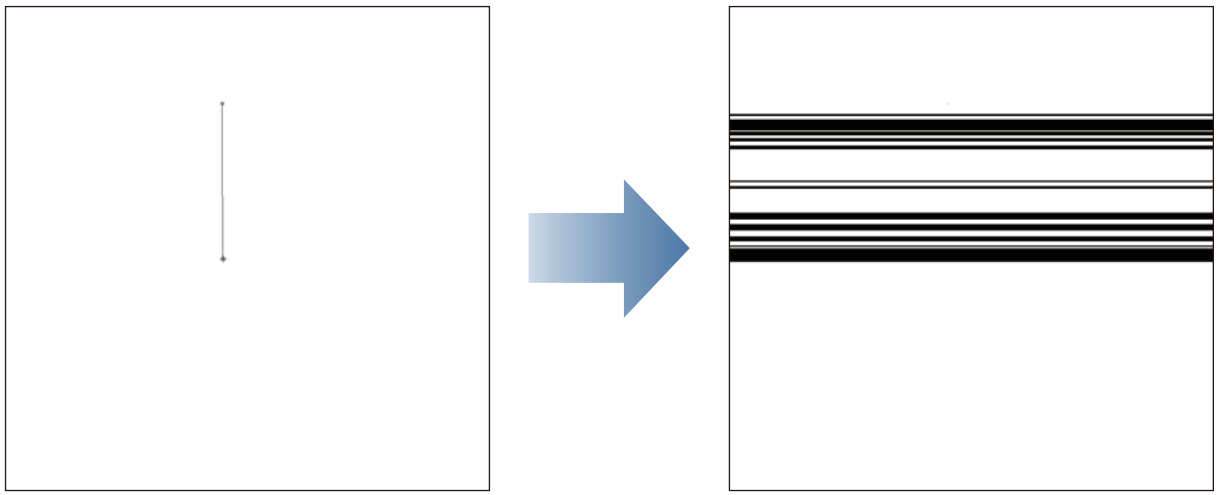
On the [Tool property] palette, you can configure the thickness, length and spacing of each of the lines that comprise the stream line. For details on the settings, see "Stream Line", "Drawing Position", and "Drawing Interval" in "Manga Studio 5.0 Tool Setting Guide".

5 Draw the stream line

Draw a [Reference line] in the position where you want to draw the stream line. Committing the [Reference line] draws the stream line as configured.

Important

How to draw the [Reference line] varies depending on the selected sub tool.

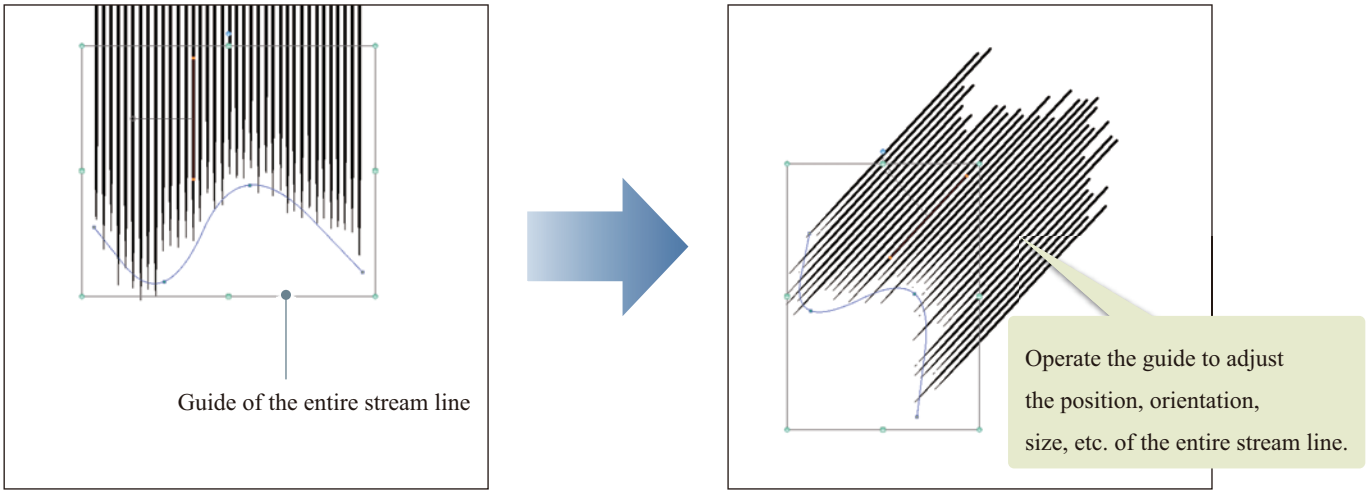


Editing a Stream Line

The following describes how to edit a stream line.

Editing a Stream Line Entirely

Selecting the [Stream line] layer and clicking a point where no stream line is drawn displays a guide. Using the handles and control points of the guide, adjust the position, orientation, size and the like of the entire stream line.



Editing the Reference Line

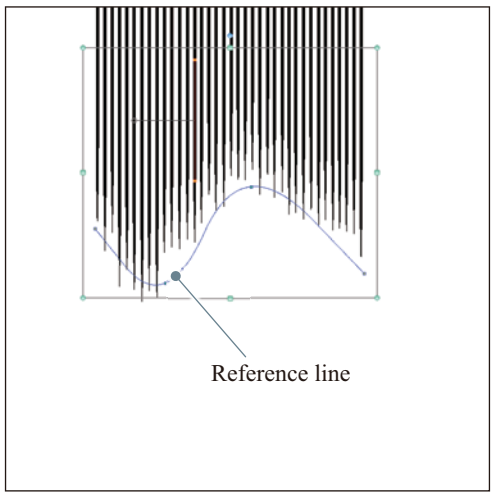
To edit the reference line, proceed as follows.

1 Select the layer

Select the [Stream line] layer.

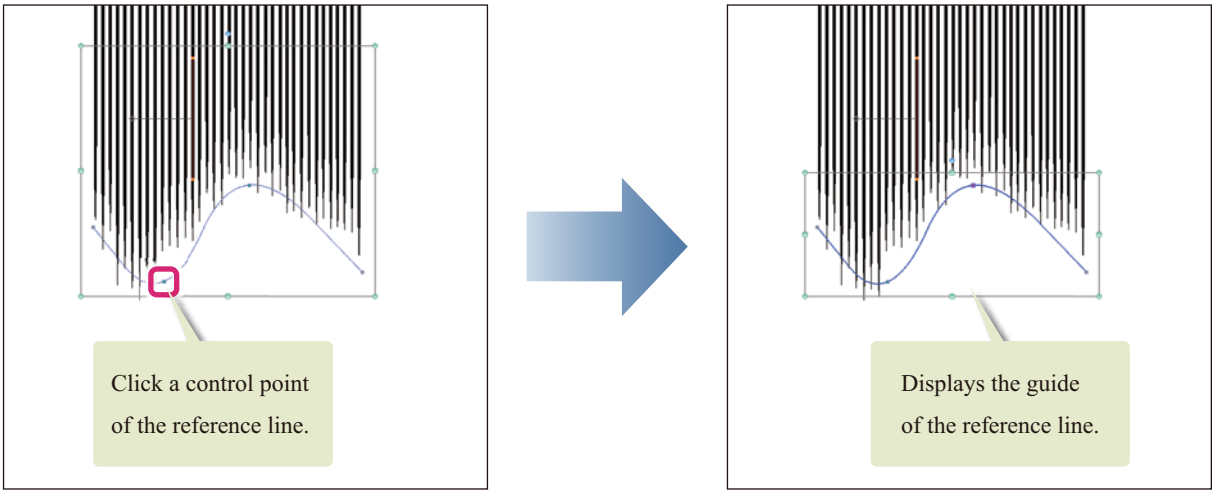
2 Display the reference line

Switch the tool to [Object] sub tool. The [Reference line] (blue line) displays.



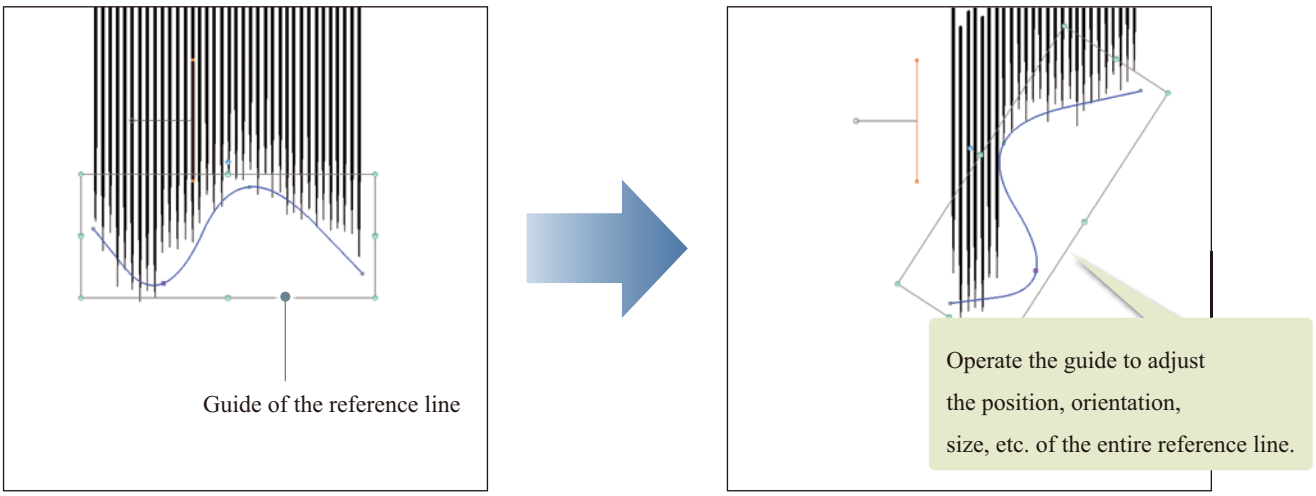
3 Edit the reference line

Clicking a control point of the [Reference line] displays a guide.



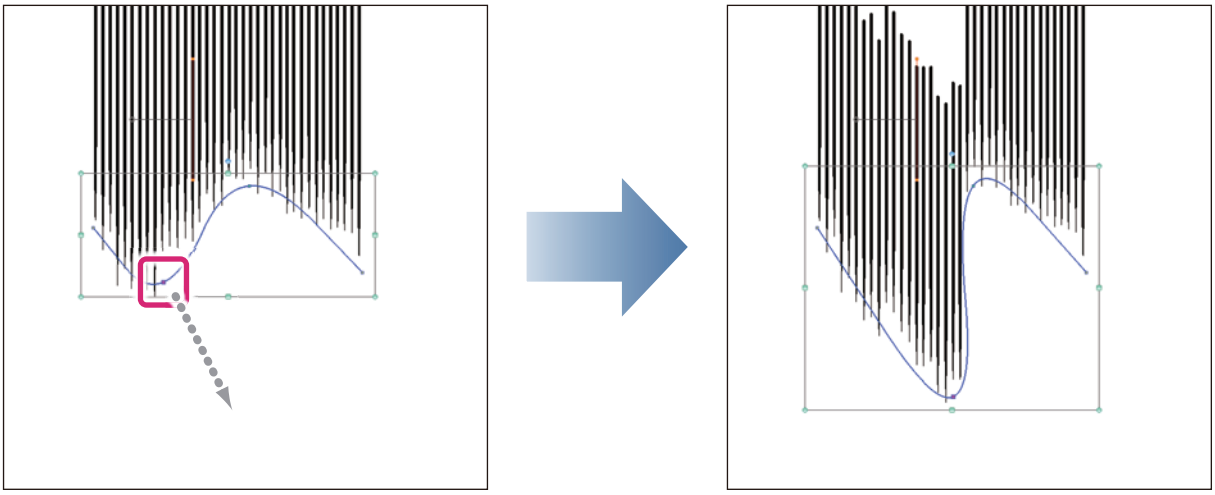
Editing the reference line entirely

Operating the handles and control points of the guide allows you to adjust the position, orientation, size and the like of the entire [Reference line].



Modifying the shape of the reference line

Dragging a control point allows you to transform the shape of the [Reference line].



Editing a control point

Select a [Control point] and right click. From the menu that displays, you can [Add control point], [Delete control point] and/or [Switch corner].

Add control point	Select a [Control point] and right click on the line. Selecting [Add control point] from the menu that displays allows you to add a [Control point] at the clicked position.
Delete control point	Allows you to delete the selected [Control point].
Switch corner	Allows you to toggle the corner of the selected [Control point] between angled and round. The corner toggles between angled corner and round corner on each click.

Memo

[Move control point], [Add control point], [Delete control point] and [Switch corner] are also possible using the [Control point] sub tool of the [Correct line] tool.

Adding and Redrawing the Reference Line

Drawing a stream line by following the steps below allows you to add or redraw the [Reference line] with the stream line settings (color, size, space between each line, and the like) and [Shape line] kept as they are.

1 Select the layer

Select the [Stream line] layer.

2 Select the tool

On the [Tool] palette, select the [Figure] tool.

3 Select the sub tool

On the [Sub tool] palette, switch the sub tool group to [Stream line] and select the [Sub tool].

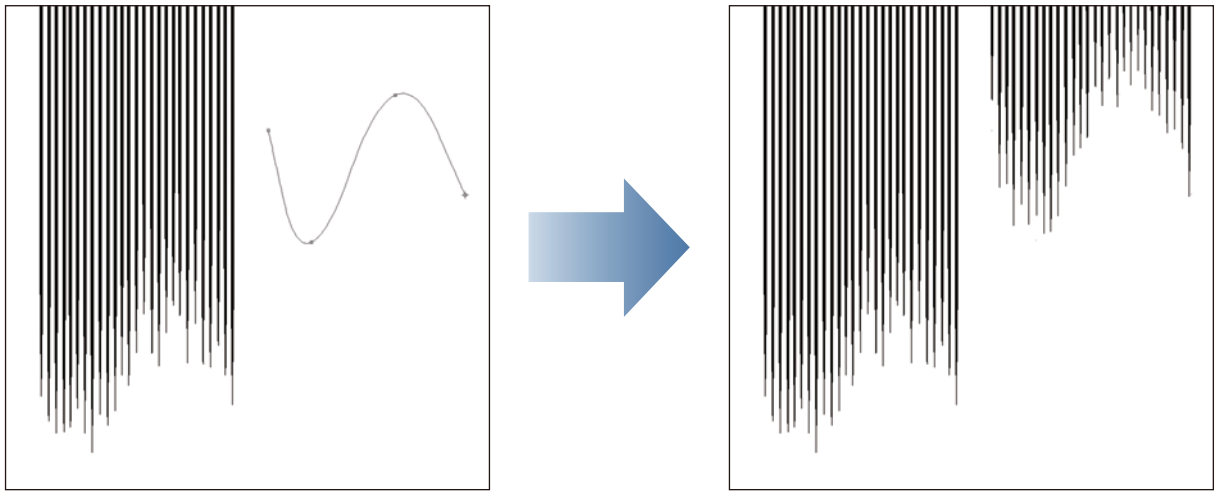
4 Configure the tool property

On the [Tool property] palette, configure [Draw on stream line layer] or [Draw on editing layer] for [Destination layer] under [Stream line].

5 Add the stream line

Draw a [Reference line] in the position where you want to draw the stream line.

A [Reference line] is added with the stream line settings (color, size, space between each line, and the like) and [Shape line] kept as they are.



Memo

Selecting a [Control point] of the [Reference line] with the [Object] sub tool and pressing the [Delete] key allows you to delete the [Reference line] individually.

Editing the Shape Line

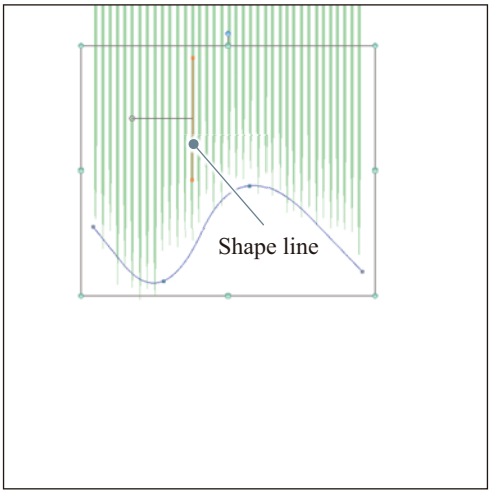
To edit the shape line, proceed as follows.

1 Select the layer

Select the [Stream line] layer.

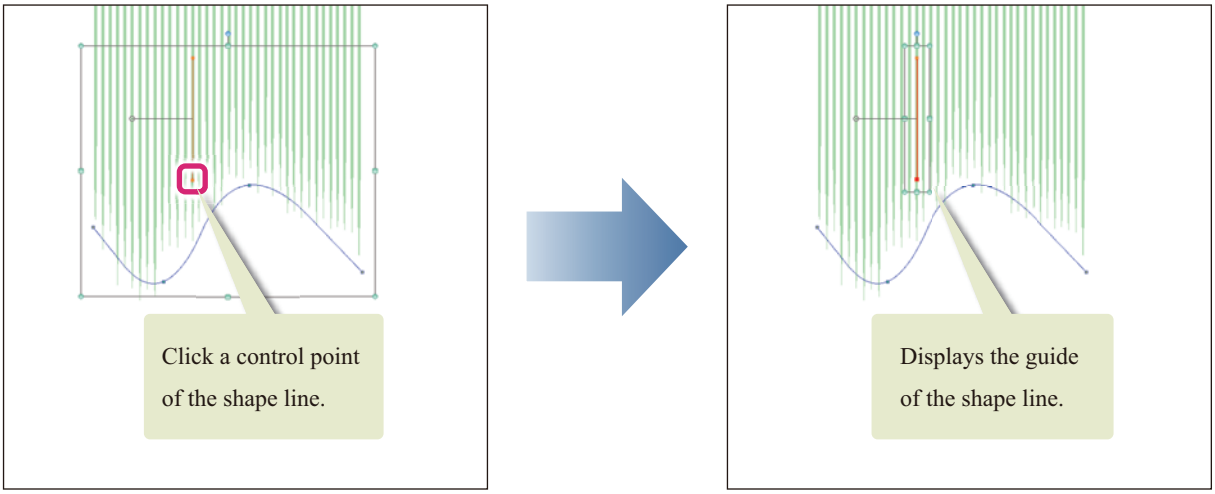
2 Display the shape line

Switch the tool to [Object] sub tool. The [Shape line] (red line) displays.



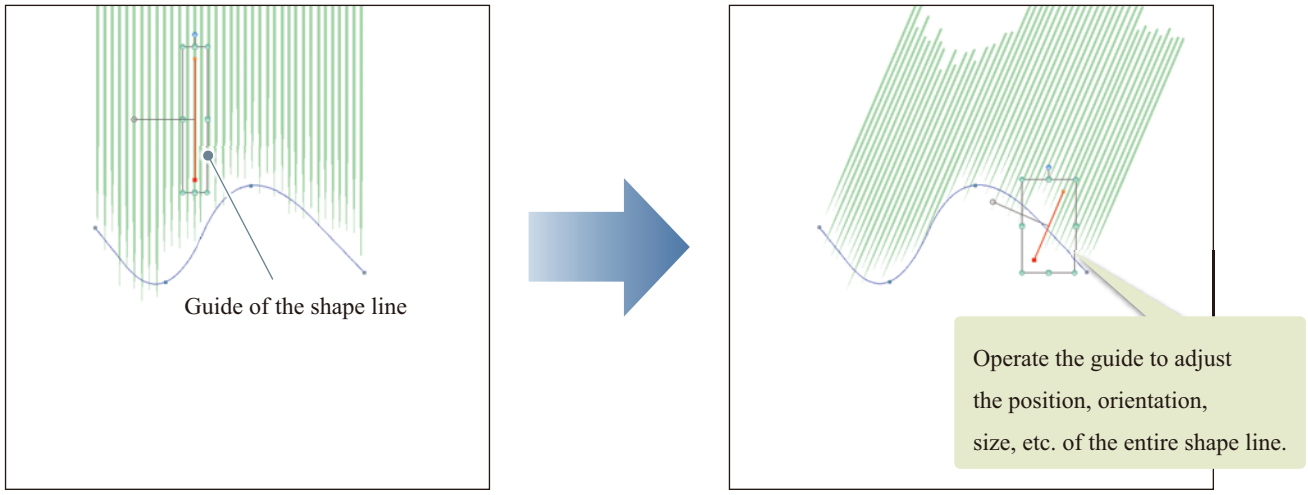
3 Edit the shape line

Clicking a control point of the [Shape line] displays a guide.



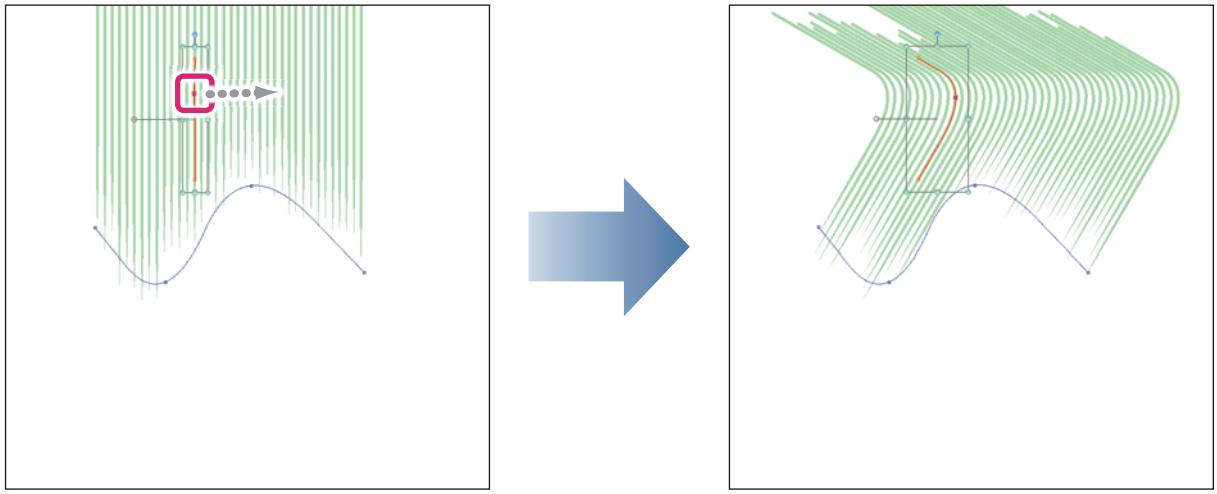
Editing the Shape Line Entirely

Operating the handles and control points of the guide allows you to adjust the position, orientation, size and the like of the entire [Shape line].



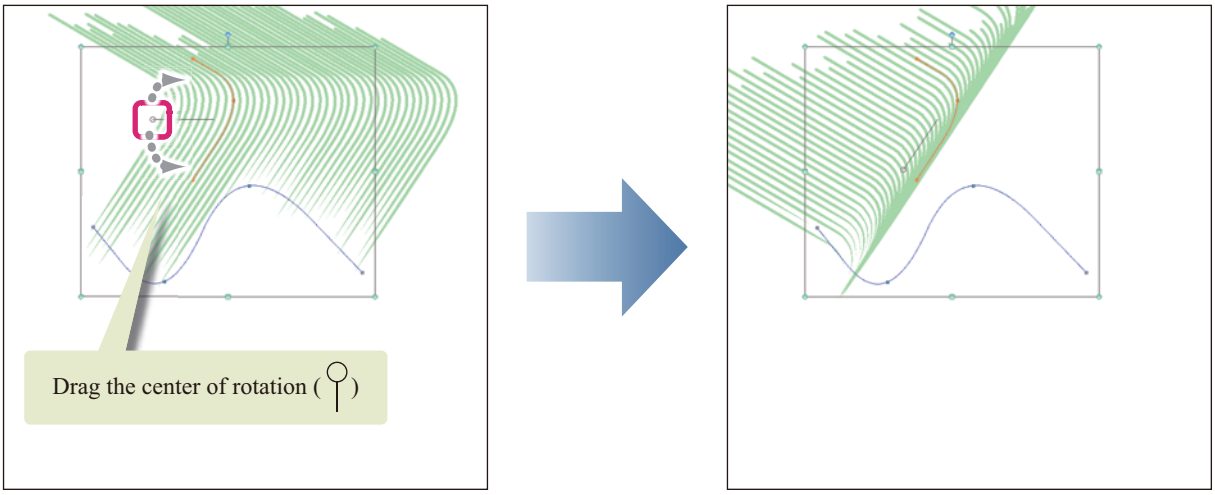
Modifying the shape of the shape line

Dragging a control point allows you to transform the shape of the [Shape line].



Adjusting the direction in which lines are added

Dragging the [Center of rotation] of the [Shape line] allows you to adjust the direction in which to draw lines with the same shape as the [Shape line].



Editing a control point

Select a [Control point] and right click. From the menu that displays, you can [Add control point], [Delete control point] and/or [Switch corner].

Add control point	Select a [Control point] and right click on the line. Selecting [Add control point] from the menu that displays allows you to add a [Control point] at the clicked position.
Delete control point	Allows you to delete the selected [Control point].
Switch corner	Allows you to toggle the corner of the selected [Control point] between angled and round. The corner toggles between angled corner and round corner on each click.

Memo

[Move control point], [Add control point], [Delete control point] and [Switch corner] are also possible using the [Control point] sub tool of the [Correct line] tool.

Editing with the [Tool property] Palette

Selecting the [Stream line] layer and changing the tool to [Object] sub tool displays settings related to the stream line on the [Tool property] palette.

The [Tool property] palette allows you to adjust the color and length of the stream line, the space between each line, and so on.

Memo

For details on the setting items, see "Stream Line", "Drawing Position", and "Drawing Interval" in "Manga Studio 5.0 Tool Setting Guide".

Creating and Editing a Saturated Line

This section describes how to create and edit a saturated line.

Creating a Saturated Line

To create a saturated line, proceed as follows.

1 Select the tool

On the [Tool] palette, select the [Figure] tool.

2 Select the sub tool

Saturated lines can be drawn using the following sub tools:

- [Saturated line] sub tool of the [Figure] tool
- [Flash] sub tool of the [Text] tool

In this example, the sub tool group is switched to [Saturated line] on the [Sub tool] palette to select the [Sub tool].

3 Configure the color for the lines

On a color palette, configure a color for the saturated line.

Memo

Turning on [Saturated line] → [Fill ground] on the [Sub tool detail] palette allows you to fill the area enclosed by the [Reference line]. For details on the settings, see "Saturated Line" in "Manga Studio 5.0 Tool Setting Guide".

4 Configure the tool property

On the [Tool property] palette, configure the settings for the saturated line to draw.

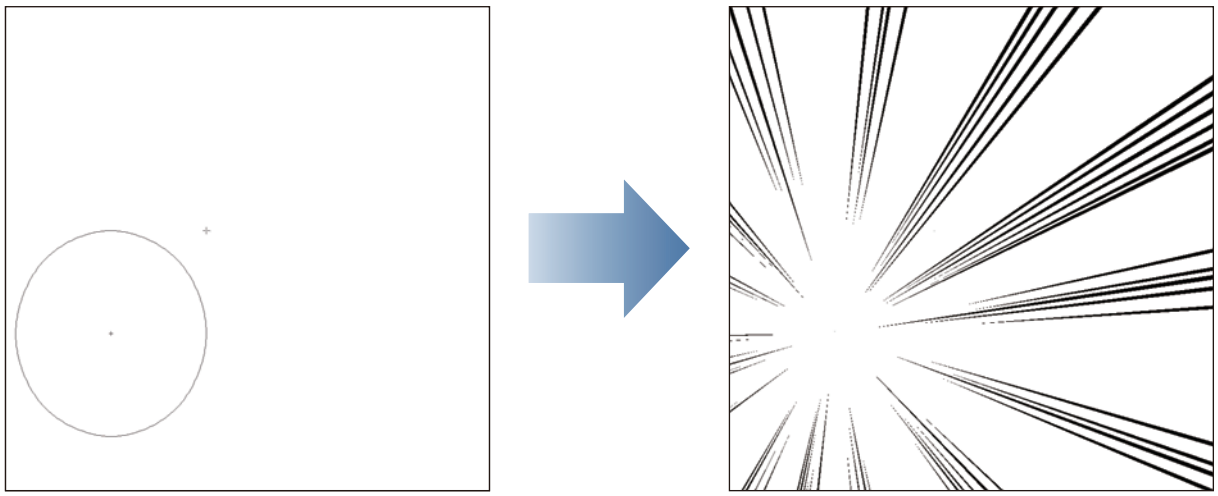
Memo

On the [Tool property] palette, you can configure the thickness, length and spacing of each of the lines that comprise the saturated line. For details on the settings, see "Saturated Line", "Drawing Position", and "Drawing Interval" in "Manga Studio 5.0 Tool Setting Guide".

5 Draw the saturated line

Draw a [Reference line] in the position where you want to draw the saturated line. Committing the [Reference line] draws the saturated line as configured.

Important **How to draw the [Reference line] varies depending on the selected sub tool.**

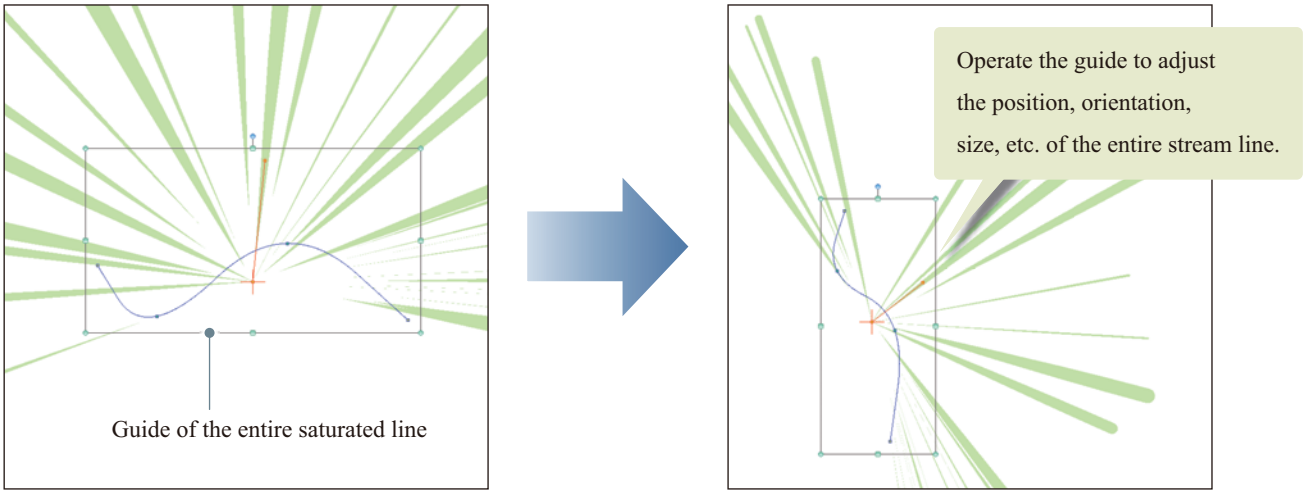


Editing a Saturated Line

The following describes how to edit a saturated line.

Editing a Saturated Line Entirely

Selecting the [Saturated line] layer and clicking a point where no saturated line is drawn displays a guide. Operating the handles and control points of the guide, adjust the position, orientation, size and the like of the entire saturated line.


Guide of the entire saturated line
Operate the guide to adjust
the position, orientation,
size, etc. of the entire stream line.

Editing the Reference Line

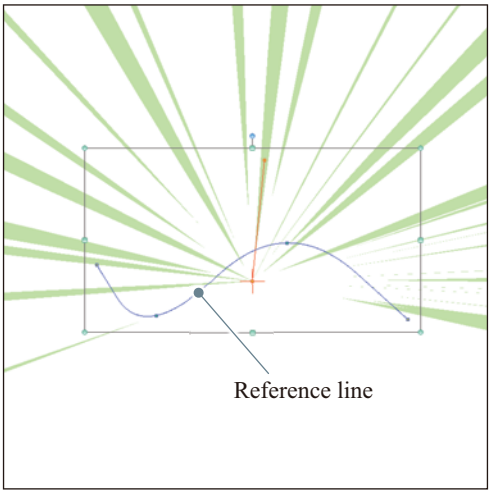
To edit the reference line, proceed as follows.

1 Select the layer

Select the [Saturated line] layer.

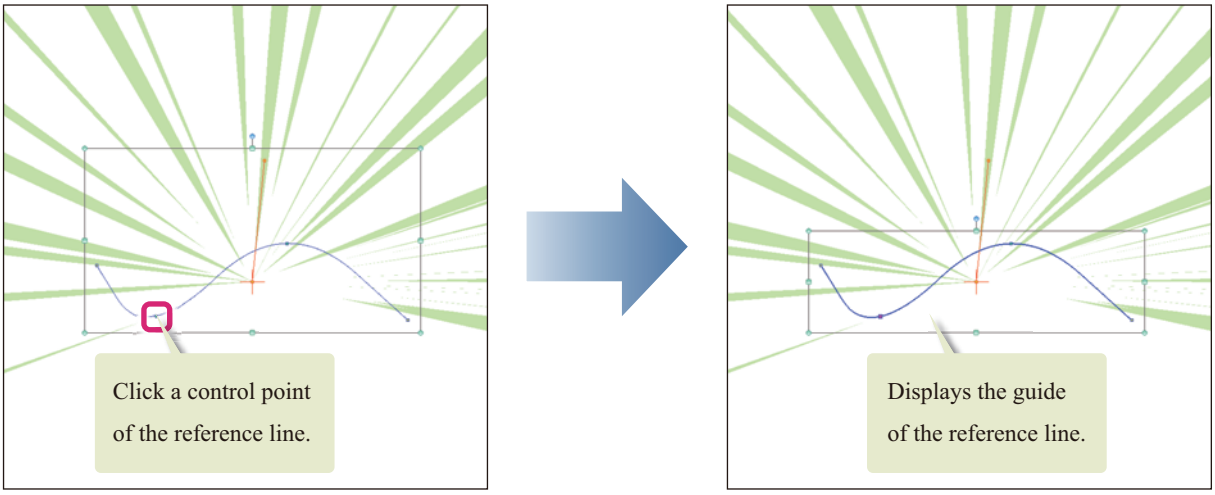
2 Display the reference line

Switch the tool to [Object] sub tool. The [Reference line] (blue line) displays.



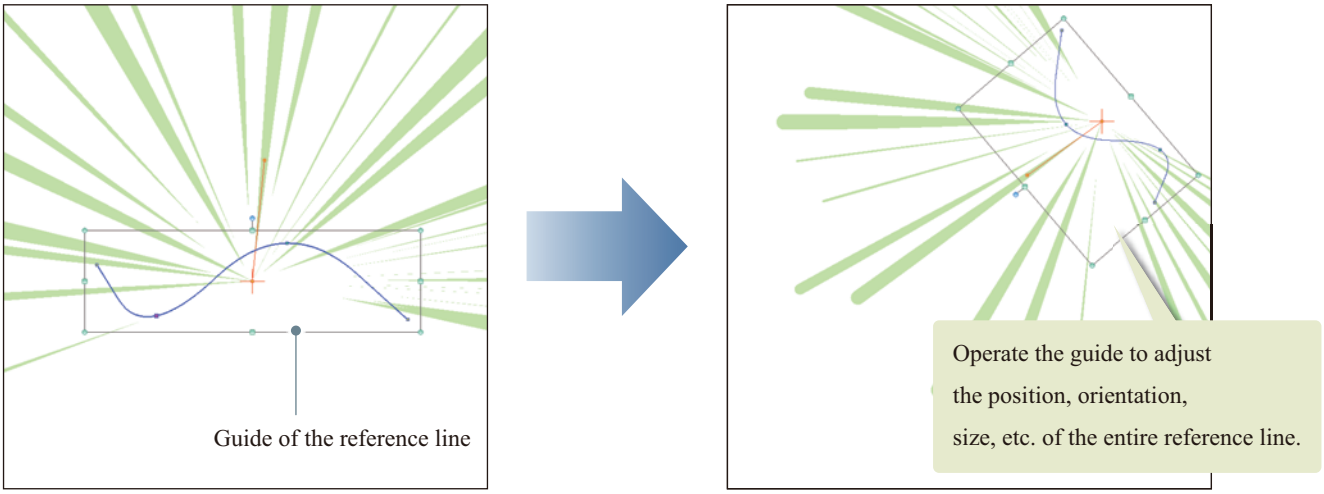
3 Edit the reference line

Clicking a control point of the [Reference line] displays a guide.



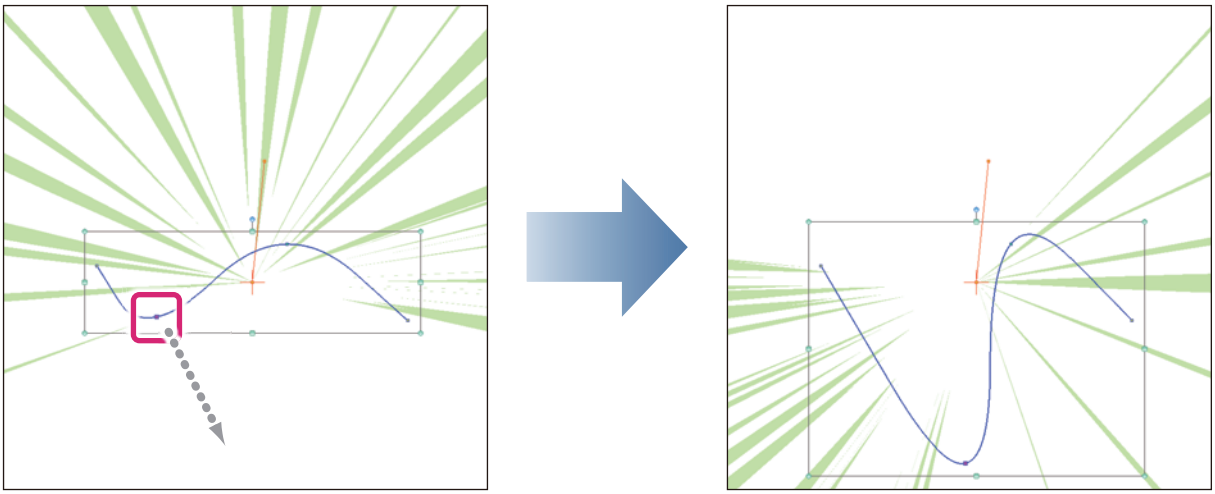
Editing the reference line entirely

Operating the handles and control points of the guide allows you to adjust the position, orientation, size and the like of the entire [Reference line].



Modifying the shape of the reference line

Dragging a control point allows you to transform the shape of the [Reference line].



Editing a control point

Select a [Control point] and right click. From the menu that displays, you can [Add control point], [Delete control point] and/or [Switch corner].

Add control point	Select a [Control point] and right click on the line. Selecting [Add control point] from the menu that displays allows you to add a [Control point] at the clicked position.
Delete control point	Allows you to delete the selected [Control point].
Switch corner	Allows you to toggle the corner of the selected [Control point] between angled and round. The corner toggles between angled corner and round corner on each click.

Memo

[Move control point], [Add control point], [Delete control point] and [Switch corner] are also possible using the [Control point] sub tool of the [Correct line] tool.

Adding and Redrawing the Reference Line

Drawing a saturated line by following the procedure below allows you to add or redraw the [Reference line], with the saturated line settings (color, size, space between each line, and the like), as well as [Shape line] and [Center point] kept as they are.

1 Select the layer

Select the [Saturated line] layer.

2 Select the tool

On the [Tool] palette, select the [Figure] tool.

3 Select the sub tool

On the [Sub tool] palette, switch the sub tool group to [Saturated line] and select the [Sub tool].

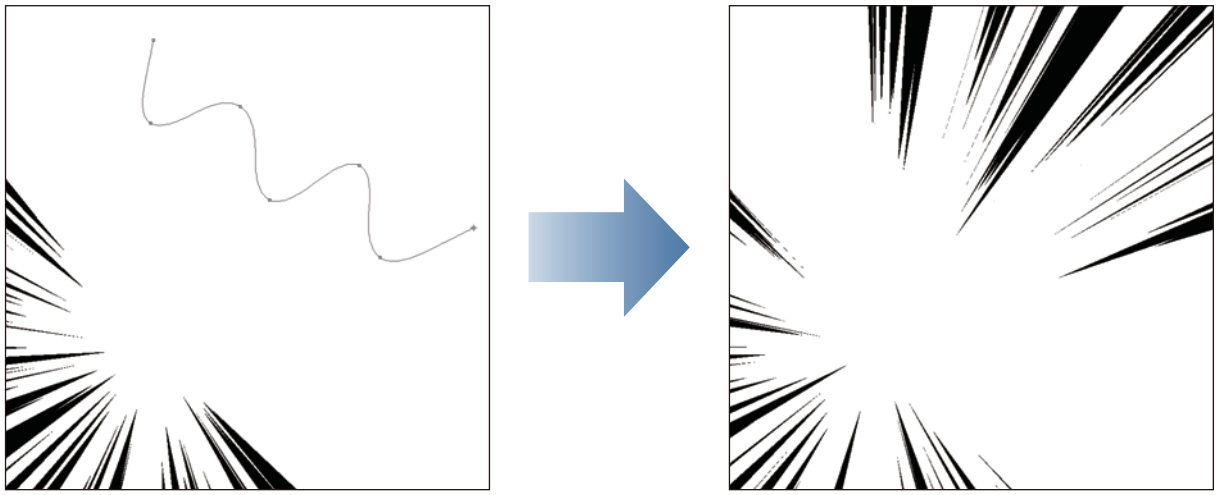
4 Configure the tool property

On the [Tool property] palette, configure [Draw on saturated line layer] or [Draw on editing layer] for [Destination layer] under [Saturated line].

5 Add the saturated line

Draw a [Reference line] in the position where you want to draw the saturated line.

The [Reference line] is added with the saturated line settings (color, size, space between each line, and the like), [Shape line] and [Center point] kept as they are.



Memo

Selecting a [Control point] of the [Reference line] with the [Object] sub tool and pressing the [Delete] key allows you to delete the [Reference line] individually.

Editing the Shape Line and Center Point

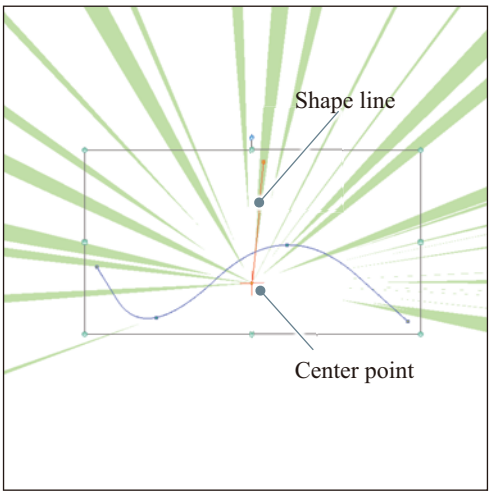
To edit the shape line and center point, proceed as follows.

1 Select the layer

Select the [Saturated line] layer.

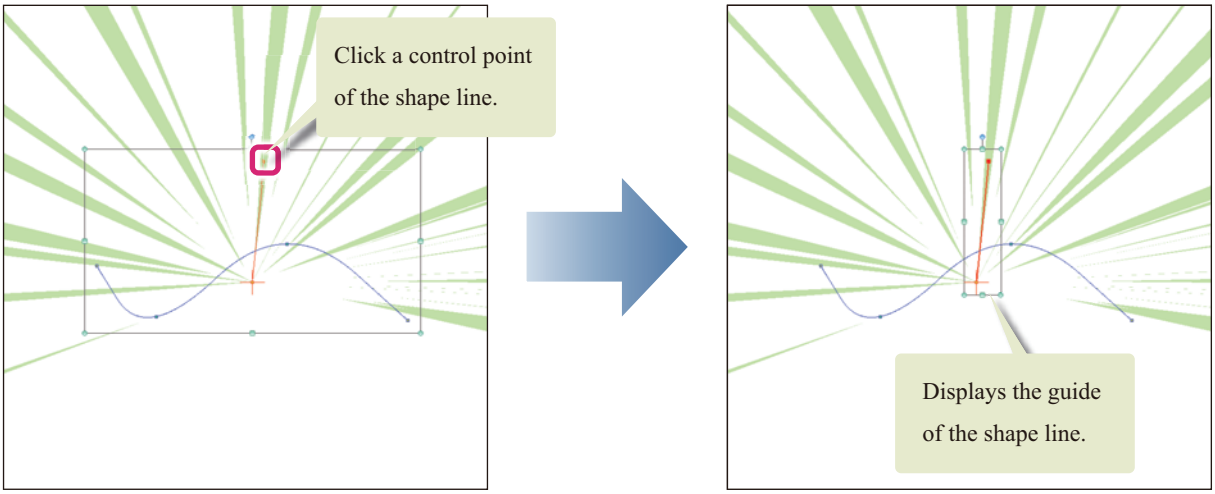
2 Display the shape line and center point

Switch the tool to [Object] sub tool. The [Shape lines] (red line) and [Center point] (red +) display.



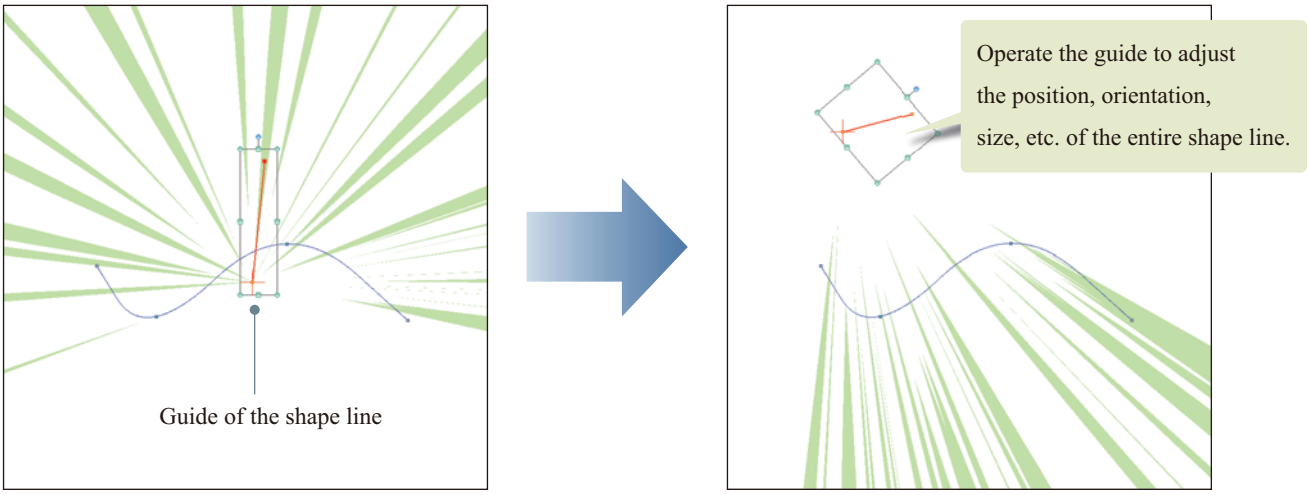
3 Edit the shape line

Clicking a control point of the [Shape line] displays a guide.



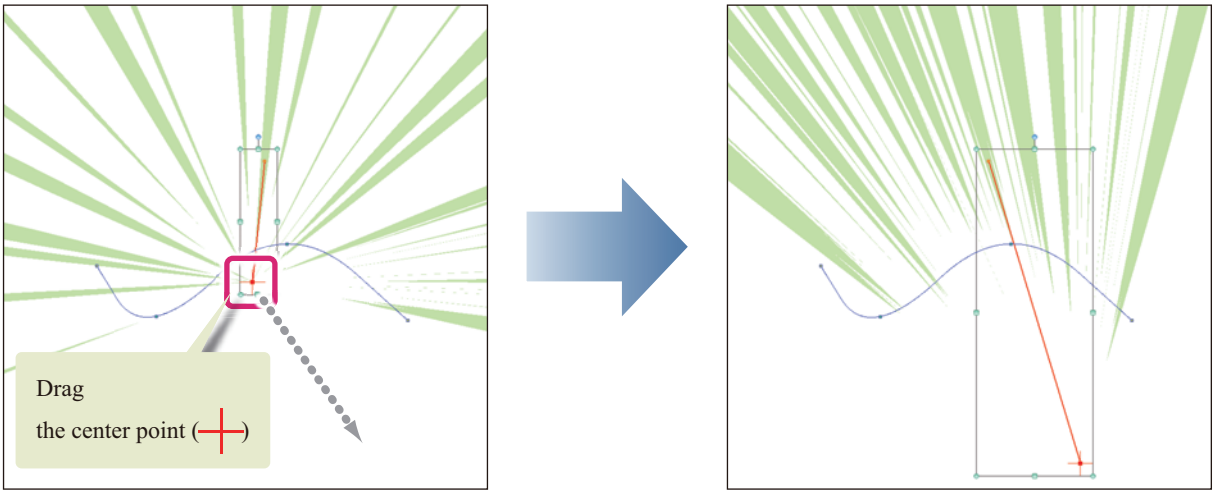
Editing the Shape Line Entirely

Operating the handles and control points of the guide allows you to adjust the position, orientation, size and the like of the entire [Shape line].



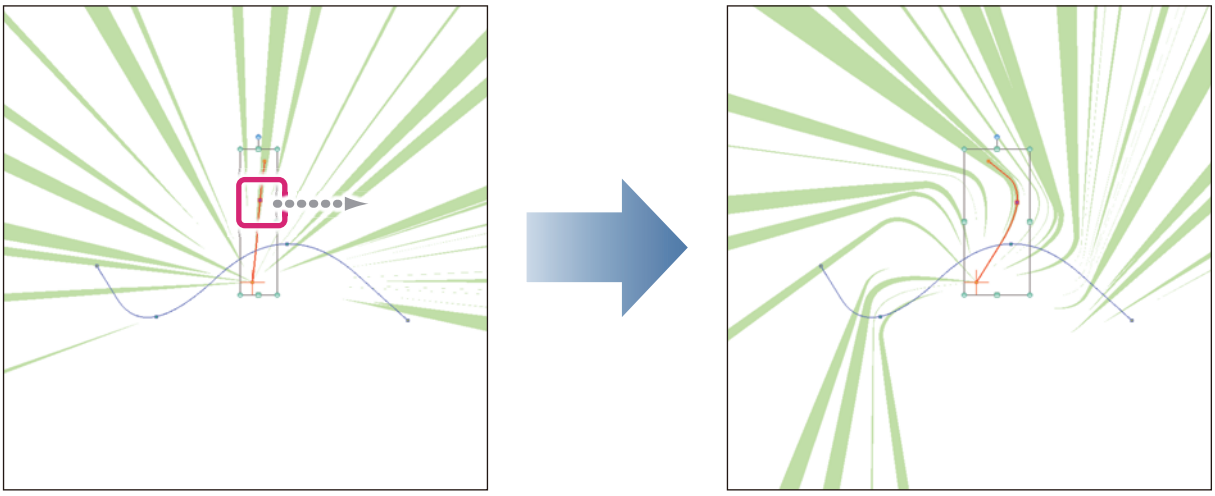
Editing the Center Point

Dragging the center point (+) allows you to adjust the position of the point of convergence of the saturated line.



Modifying the shape of the shape line

Dragging a control point allows you to transform the shape of the [Shape line].



Editing a control point

Select a [Control point] and right click. From the menu that displays, you can [Add control point], [Delete control point] and [Switch corner].

Add control point	Select a [Control point] and right click on the line. Selecting [Add control point] from the menu that displays allows you to add a [Control point] at the clicked position.
Delete control point	Allows you to delete the selected [Control point].
Switch corner	Allows you to toggle the corner of the selected [Control point] between angled and round. The corner toggles between angled corner and round corner on each click.

Memo **[Move control point], [Add control point], [Delete control point] and [Switch corner] are also possible using the [Control point] sub tool of the [Correct line] tool.**

Editing with the [Tool property] Palette

Selecting the [Saturated line] layer and changing the tool to [Object] sub tool displays settings related to the saturated line on the [Tool property] palette.

The color, size and space between each line can be adjusted with the [Tool property] palette.

Memo **For details on the settings, see "Saturated Line", "Drawing Position", and "Drawing Interval" in "Manga Studio 5.0 Tool Setting Guide".**

Explanation: Touch Operations in Windows8

Manga Studio 5.0 supports touch operations in Windows8.
This section describes how to switch to the screen optimized for touch operations in Windows8 and how to operate Manga Studio 5.0 by touch operations.

Switch to Screen Optimized for Touch Operations

You can switch to the screen optimized for touch operations in Windows 8 in the [Preferences] dialog box. This section describes how to switch to the screen optimized for touch operations

1 Select the command

From the [File] menu, select [Preferences]. The [Preferences] dialog box opens.

2 Configure the [Preferences] dialog box.

Configure on the [Preferences] dialog box.

(1) Click [Interface].

(2) Turn on [Adjust an interface to suit touch operations].

(3) Configure the sizes of buttons and characters in [Interface scaling].

(4) Click [OK].

Memo

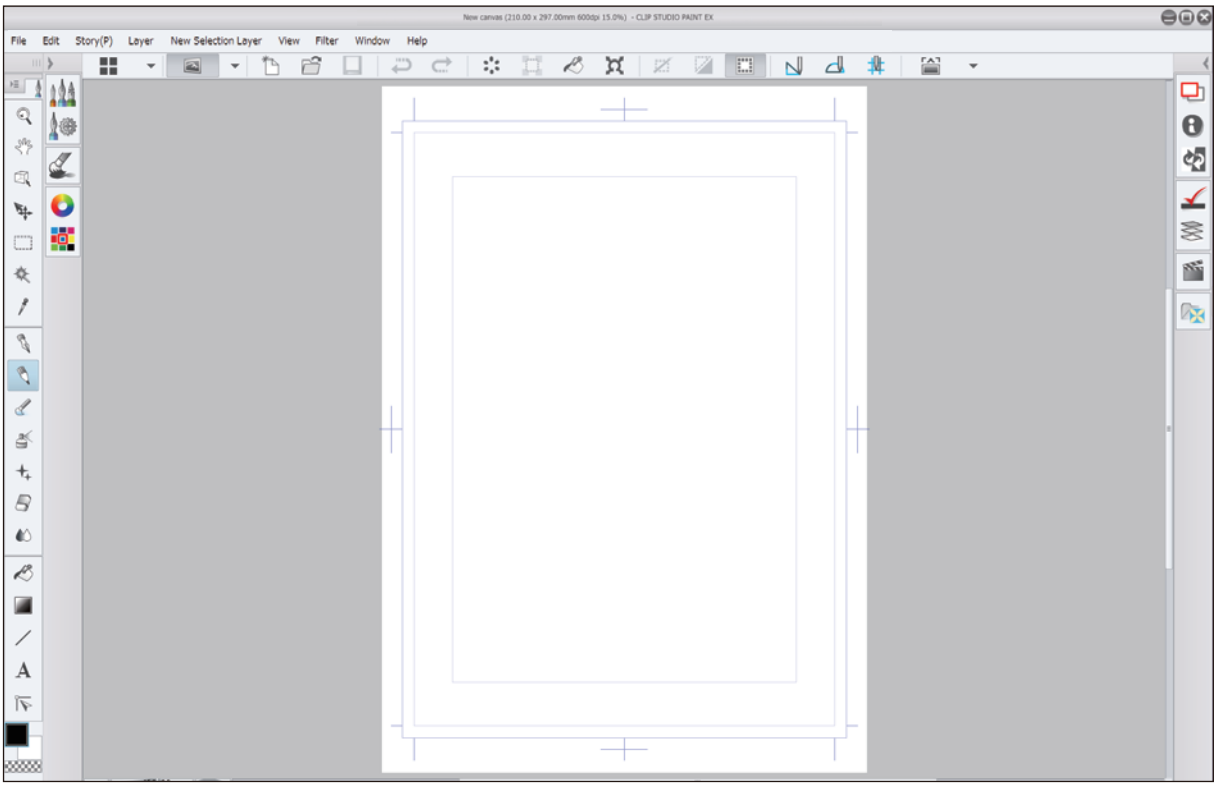
Depending on the settings of Windows, there might be some items which are not displayed by the [Large], [Default], and [Small] buttons.

3 Quit the application

Close Manga Studio 5.0.

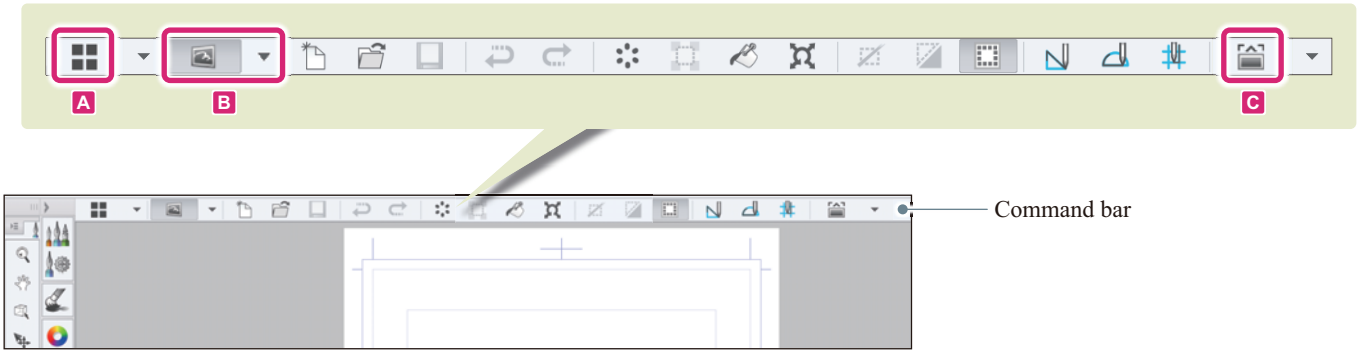
4 The screen is optimized

Start Manga Studio 5.0. The screen of Manga Studio 5.0 has been optimized for touch operations in Windows8.



Command bar

On [Command bar], there are some items to use the screen optimized for touch operations conveniently.



A. Show menu

Touching the icon displays the menu of Manga Studio 5.0 with buttons.

Memo **If you click [Show menu] by the touch pen or mouse, the normal menu is shown.**

B. Switch between pen and touch operations in operating the canvas

When operating the canvas, you can switch whether to perform drawing operations by touch pen or touch operations by finger.

(1) Automatically switch between pen and touch operations

When operating the canvas, drawing operations by touch pen and touch operations by finger are switched automatically.

Memo **For details on touch operations on the canvas, see "Operatiing the Canvas by Touch Operations".**

(2) Perform drawing operations by pen

Allows you to perform drawing operations by pen when operating on the canvas. The selected tool can be operated when operating on the canvas by finger.

Important **When [Perform drawing operations by pen] is turned on, touch operations on the canvas are disabled.**

(3) Perform touch operations by finger

Allows you to perform touch operations by finger when operating on the canvas. The selected tool can be operated when operating on the canvas by touch pen. However, the touch pen pressure etc. are not detected.

Memo **For details on touch operations on the canvas, see "Operatiing the Canvas by Touch Operations".**

C. Show/hide title bar and menu bar

Touching the icon shows/hides [Title bar] and [Menu bar].

Memo **Turning off [Show canvas tab] on the menu displayed when ▼ is clicked on the right of [Show/hide title bar and menu bar], hides the canvas tab when there is only one canvas opened in the main window.**

Operating Manga Studio 5.0 by Touch Operations

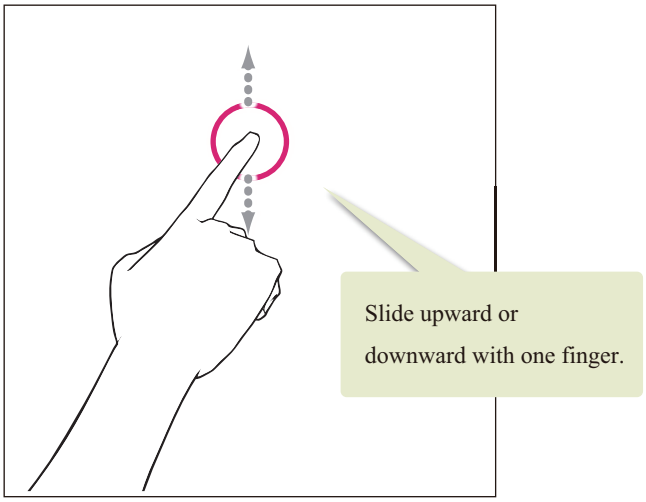
This section describes the type of touch operations used in Manga Studio 5.0 and how to operate canvas and palette by touch operations.

Type of touch operations

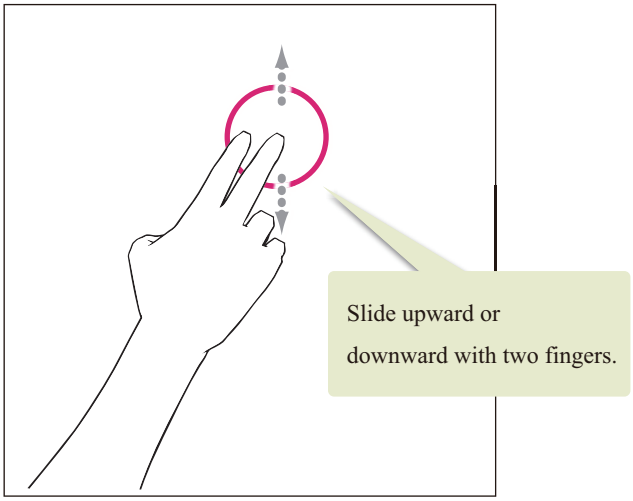
Touch operations used in Manga Studio 5.0 are as follows.

Swipe vertically

Swipe vertically by one finger

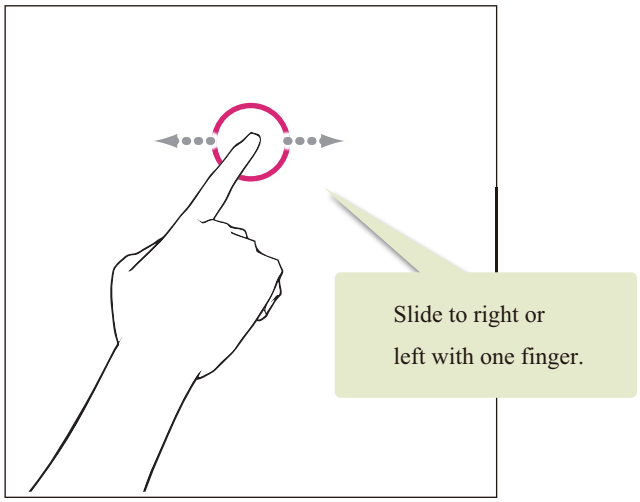


Swipe vertically by two finger

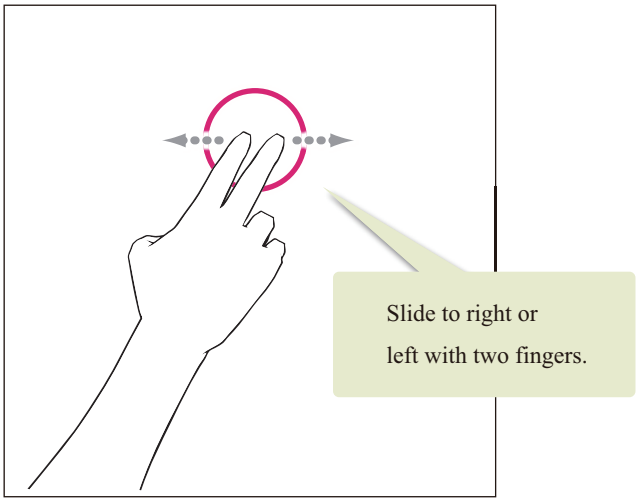


Swipe horizontally

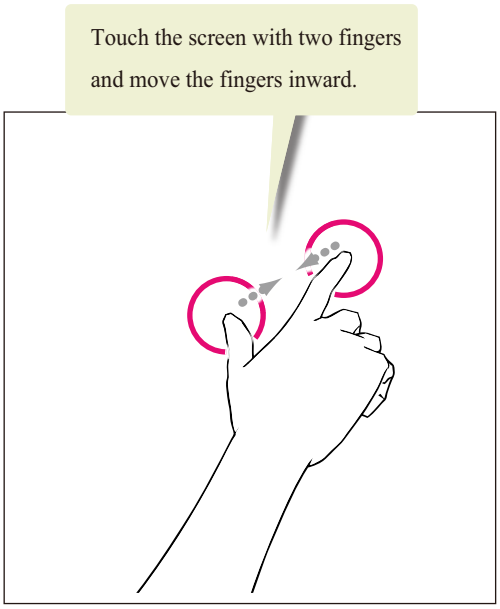
Swipe horizontally by one finger



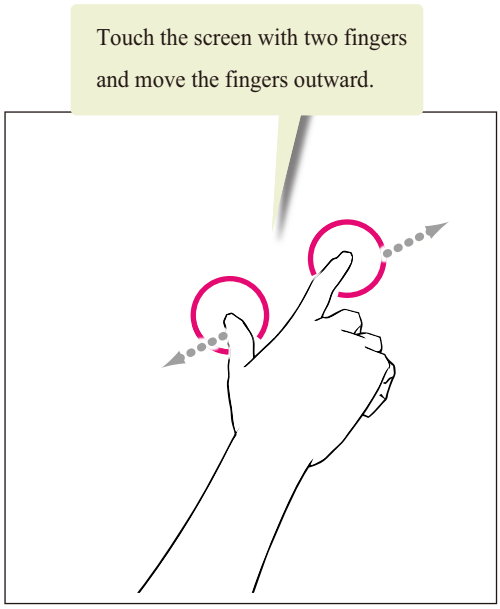
Swipe horizontally by two finger



Pinch in/pinch out

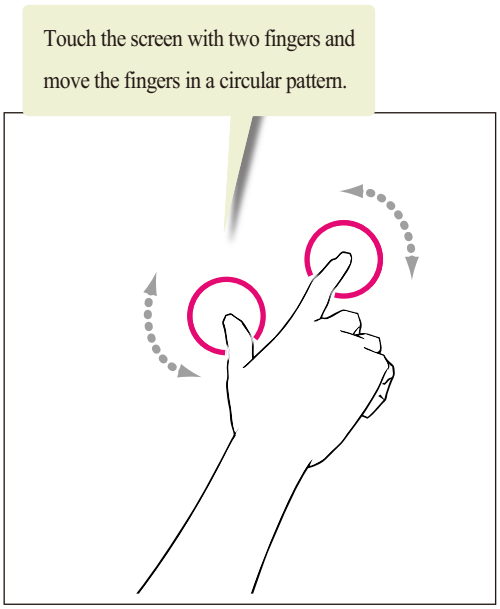


Pinch in

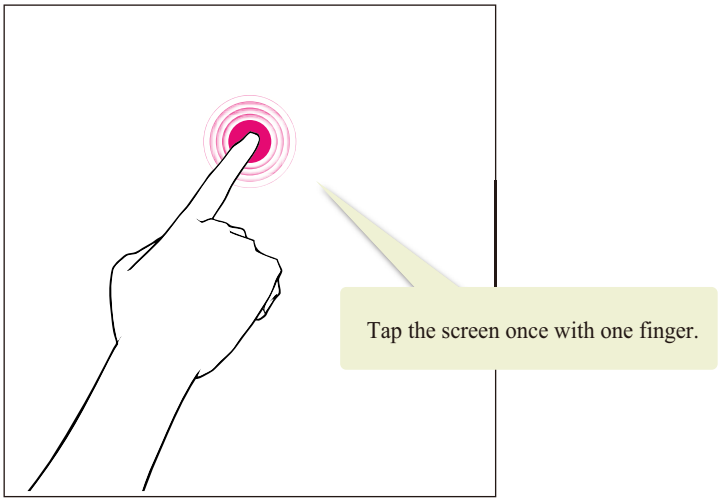


Pinch out

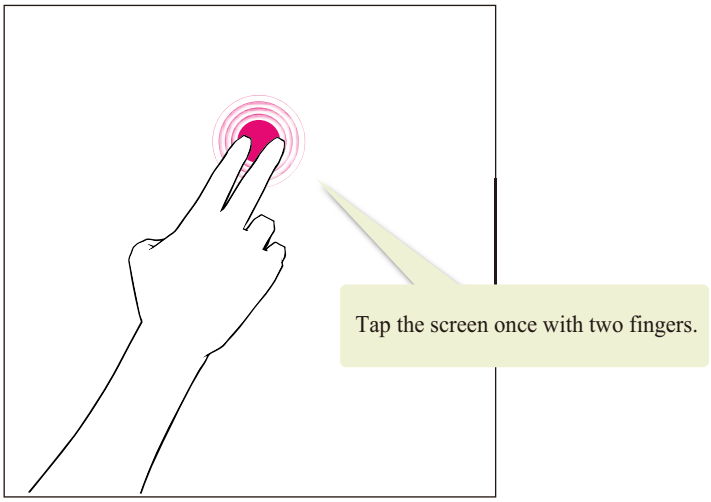
Rotate



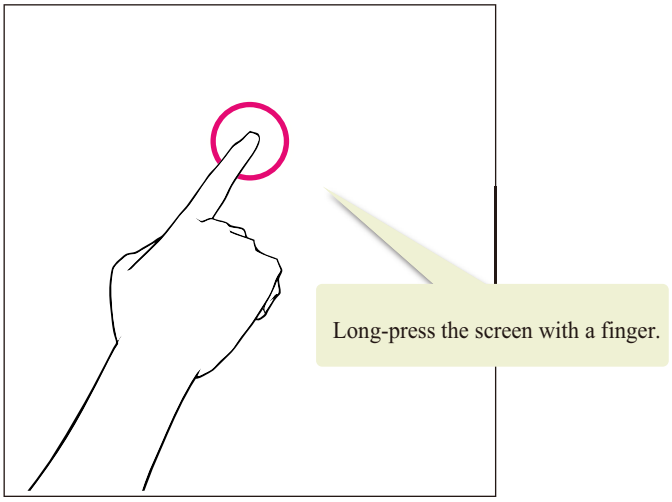
Tap



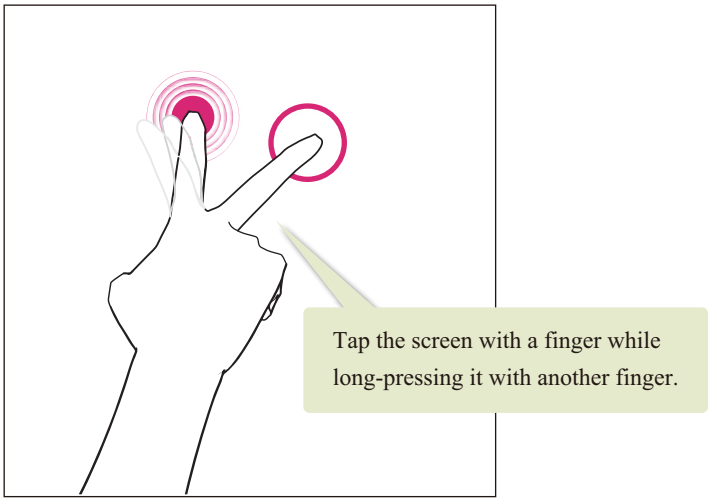
Tap by two fingers



Press



Press and tap



Operatiing the Canvas by Touch Operations

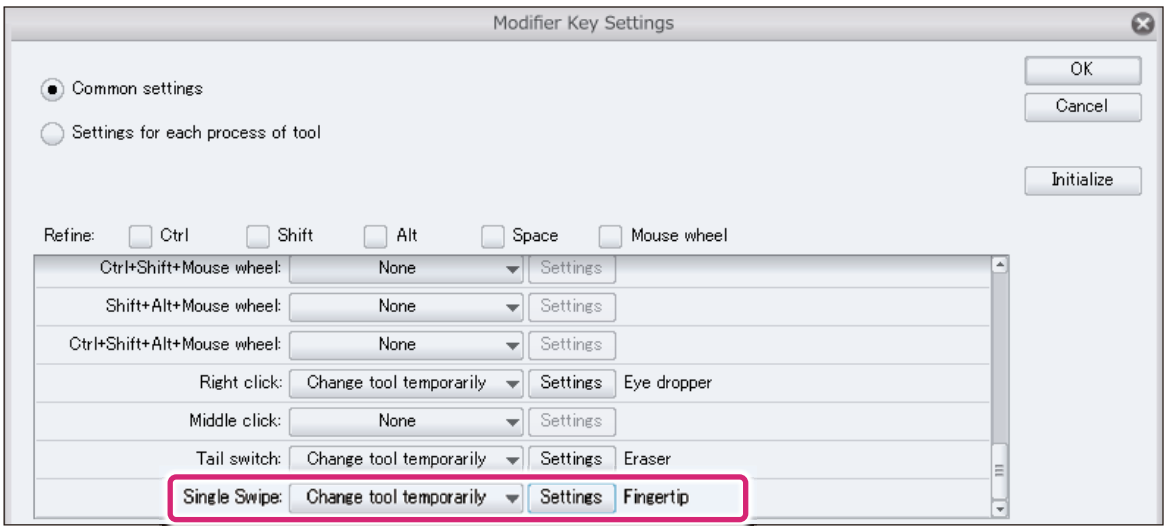
On the screen optimized for touch operations, the above-mentioned touch operations can be performed on the canvas.

Important

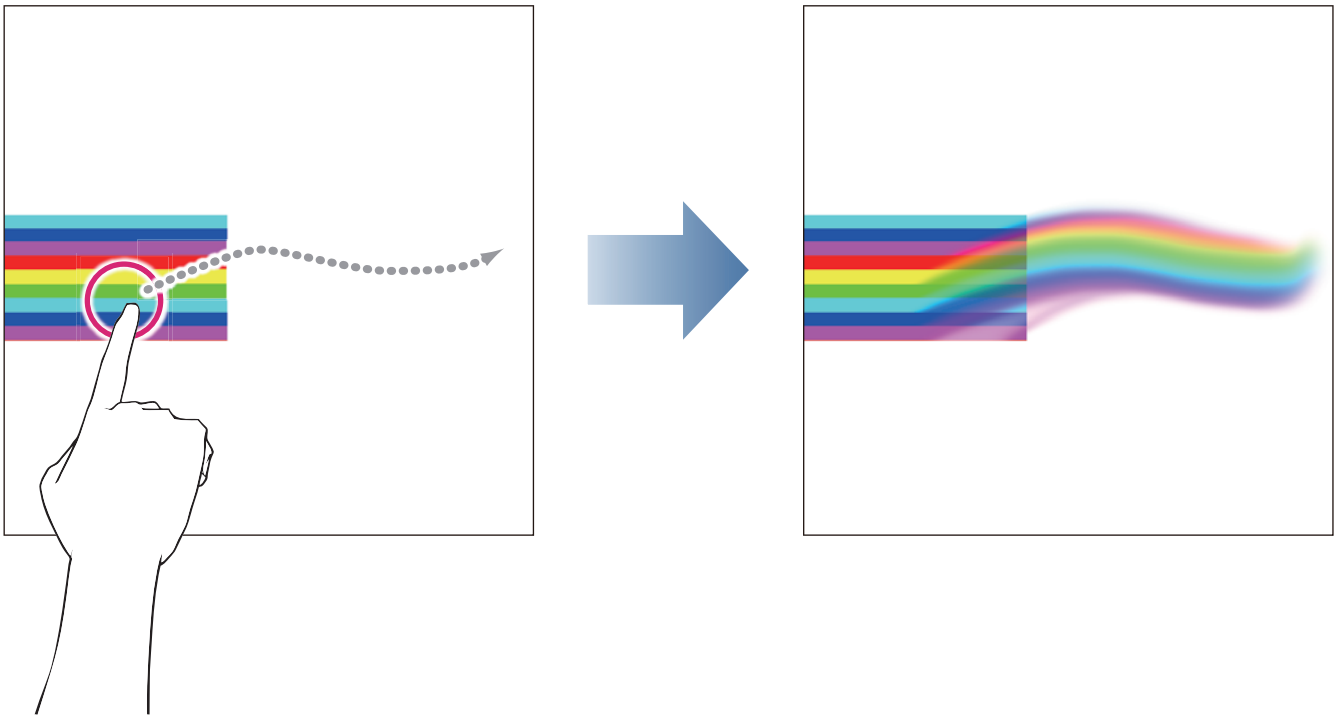
Touch operations on the canvas is available only when [Automatically switch between pen and touch operations] and [Perform touch operations by finger] on the [Command bar] are turned on. For details, see "Command bar" .

Swipe vertically/horizontally by one finger

Swiping vertically/horizontally by one finger on the canvas allows you to execute the functions assigned to [Single swipe] on the [Modifier key settings] dialog box. For details on the [Modifier key settings] dialog box, see "Modifier key settings [Windows]" .

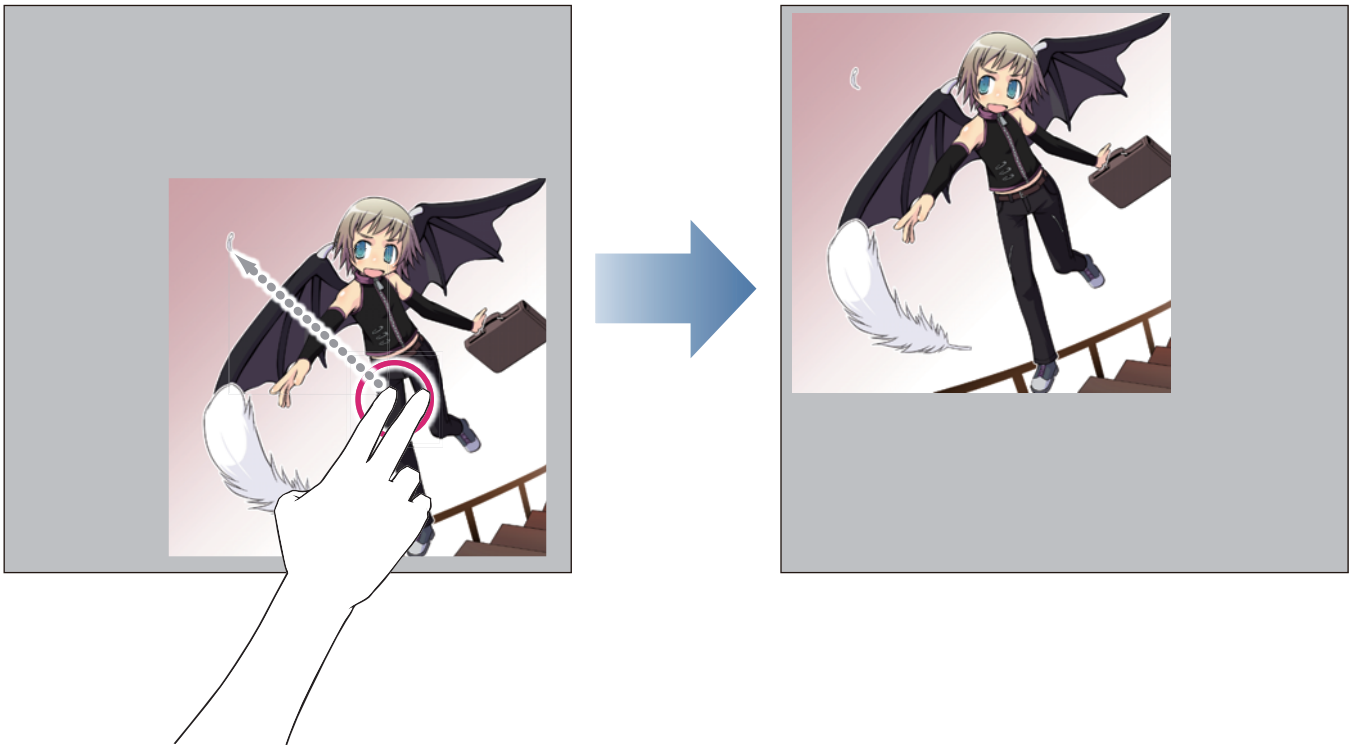


Setting [Fingertips] sub tool to [Single swipe]



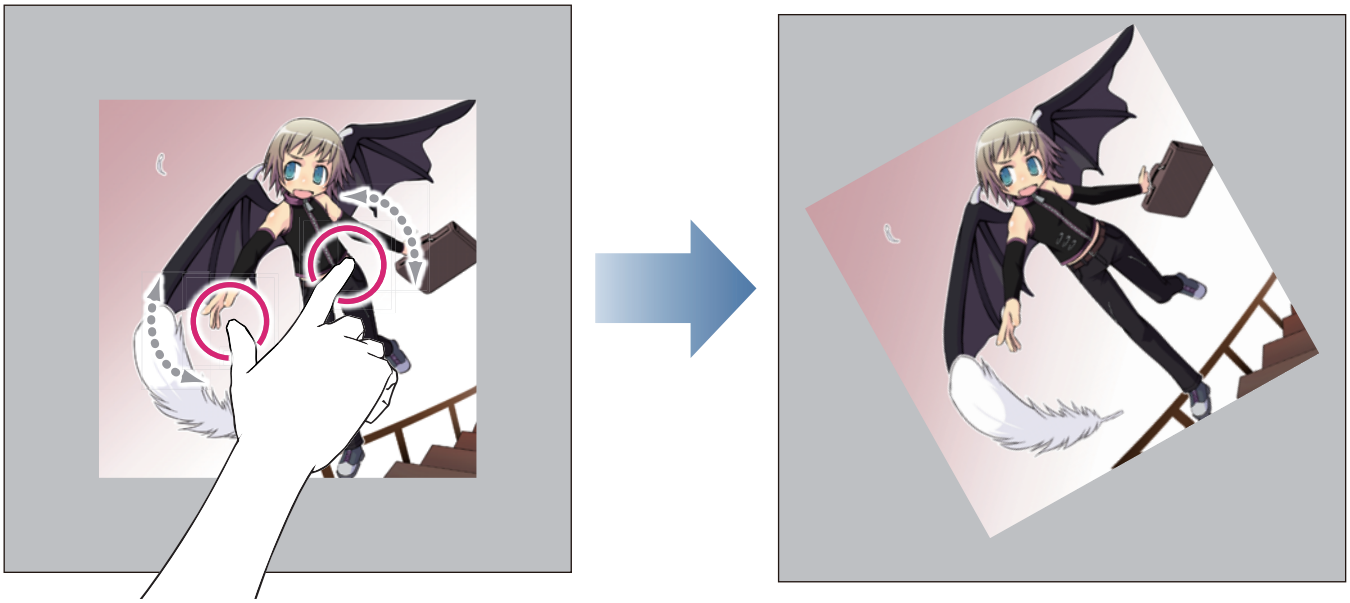
Swipe vertically/horizontally by two fingers

Swiping vertically/horizontally by two fingers on the canvas scrolls the canvas.



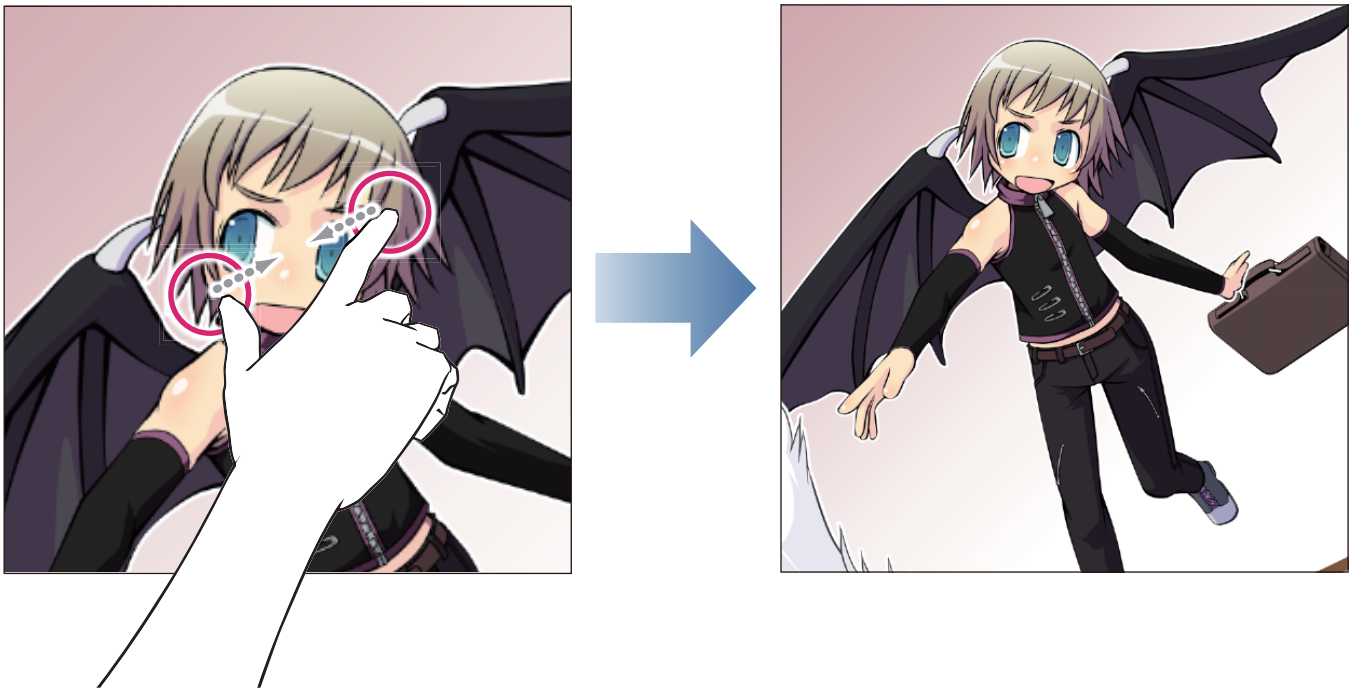
Rotate

Rotating on the canvas rotates the canvas.

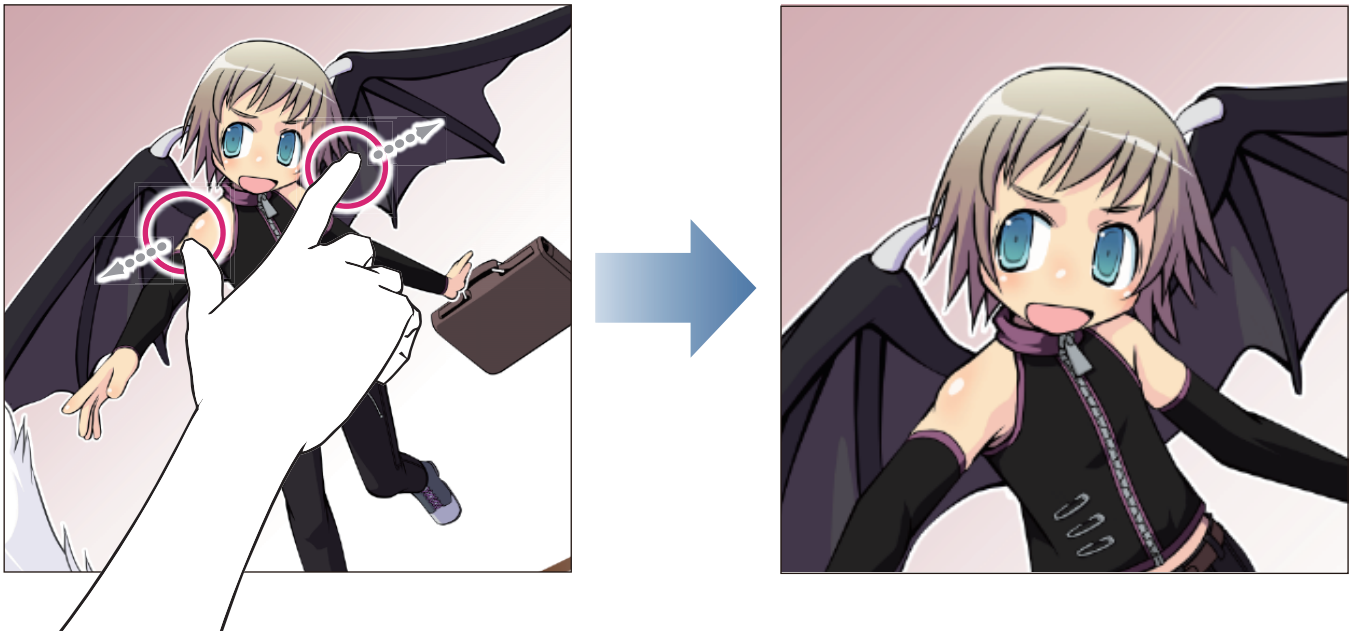


Pinch in/pinch out

Pinching in on the canvas szooms out the canvas view.



Pinching out on the canvas zooms in the canvas view.



Press and tap on Navigator Palette

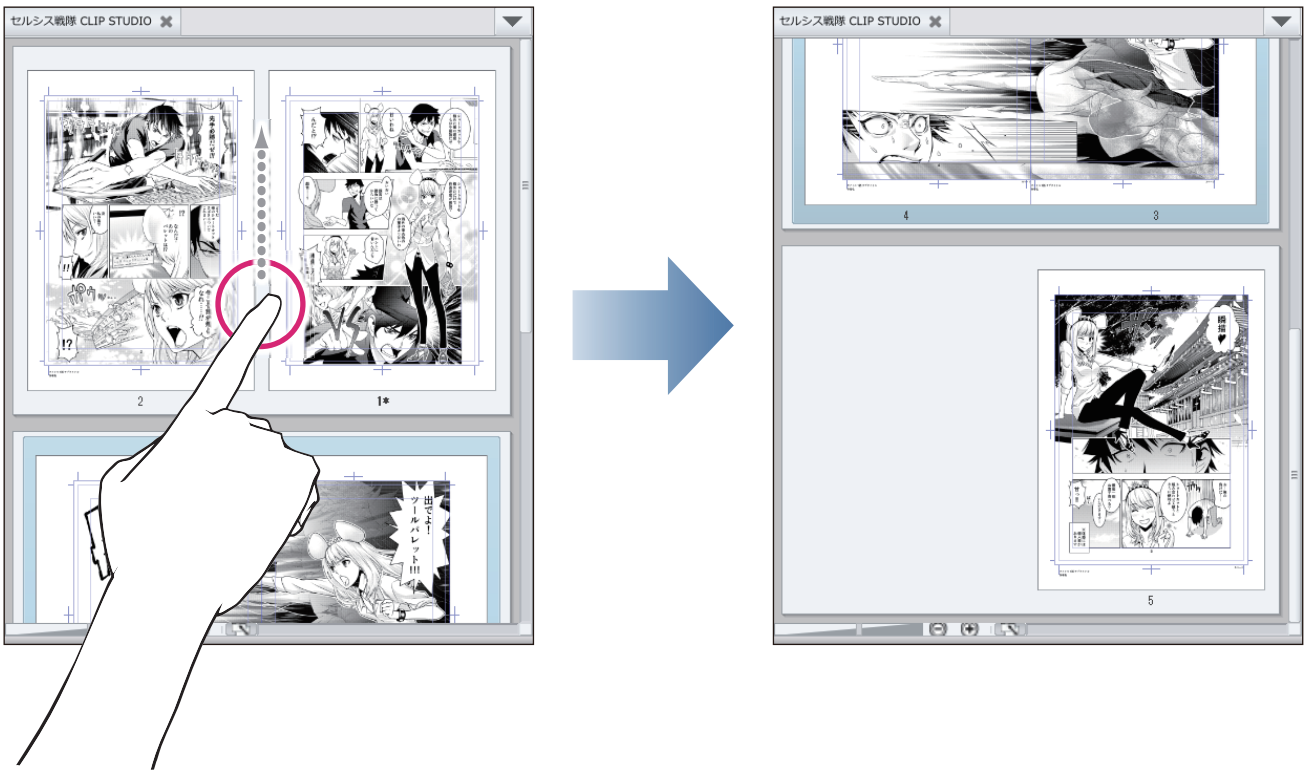
Pressing and tapping an image shown on the [Navigator] palette, resets the rotation of the canvas and displays the whole canvas.

Operating the Page manager Window by Touch Operations

On the screen optimized for touch operations, swiping vertically/horizontally in the [Page manager] window allows you to scroll.

Memo

Both swiping vertically/horizontally by one finder and two fingers are allowed.



Operation of Palette by Touch Operations

On the screen optimized for touch operations, the above-described touch operations can be performed on each palette.

Tool palette

The following touch operations are available on the [Tool] palette.

Swipe vertically/horizontally

Swiping the tool icon vertically/horizontally, switches the position of the icon.

Sub tool palette

The following touch operations are available on the [Sub tool] palette.

Swipe horizontally

Swiping the button of a sub tool horizontally, switches the position of the button.

Tap by two fingers

Tapping in the [Sub tool] palette by two fingers, shows/hides the [Command bar].

Tool property palette

The following touch operations are available on the [Tool property] palette.

Tap by two fingers

Tapping in the [Tool property] palette by two fingers, shows/hides [Stroke preview] and [Command bar].

Sub tool detail palette

The following touch operations are available on the [Sub tool detail] palette.

Swipe vertically

Swiping the list of [Brush tip shape] vertically switches the items of the list.

Color set palette

The following touch operations are available on the [Color set] palette.

Tap by two fingers

Tapping in the [Color set] palette by two fingers, shows/hides the [Command bar].

Layer Palette

The following touch operations are available on the [Layer] palette.

Swipe vertically

- Swiping the eye icon vertically, shows/hides the layer.
- Swiping the selected icon vertically, switches the selected layer.

Swipe horizontally

Swiping the layer horizontally, switches the order of layers.

Tap by two fingers

Tapping in the [Layer] palette by two fingers, shows/hides [Command bar] and [Property bar].

Search layer Palette

The following touch operations are available on the [Search layer] palette.

Swipe vertically

- Swiping the eye icon vertically, shows/hides the layer.
- Swiping the selected icon vertically, switches the selection of the layer.

Tap by two fingers

Tapping in the [Search layer] palette by two fingers, shows/hides [Command bar] and [Property bar].

Navigator Palette

The following touch operations are available on the [Navigator] palette.

Pinch in/pinch out

Pinching out an image shown on the [Navigator palette] palette, scales down the display. Pinching in scales up the display.

Rotate

Rotating an image shown on the [Navigator palette] palette, rotates the canvas.

Tap by two fingers

Tapping in the [Navigator] palette by two fingers, shows/hides [Command bar].

Press and tap

Pressing and tapping an image shown on the [Navigator palette] palette, resets the rotation of the canvas and displays the whole canvas.

Sub view Palette

The following touch operations are available on the [Sub view] palette.

Pinch in/pinch out

Pinching in/out an image shown on the [Sub view] palette, scales up/down the display.

Tap by two fingers

Tapping in the [Sub view] palette by two fingers, shows/hides [Command bar].

Material Palettes

The following touch operations are available on the [Material] palette.

Swipe horizontally

Swiping [Tree view] horizontally, switches the order of the items in the tree.

Auto action Palette

The following touch operations are available on the [Auto action] palette.

Swipe horizontally

Swiping [Auto action list] horizontally, switches the order of the items.

Tap by two fingers

Tapping in the [Auto action] palette by two fingers, shows/hides the [Command bar].

Explanation: Expression Color and Drawing Color

This chapter describes the expression color and drawing color in Manga Studio 5.0.

Expression Color and Drawing Color

There are three types of expression colors in Manga Studio 5.0: monochrome , gray and color. The drawing colors you can use vary depending on the expression color type.

Monochrome (Black, White and Transparent)

Monochrome is an expression color comprising black, white and transparent. It is used for drawing lines (main lines and the like).

Example of [Monochrome] drawing

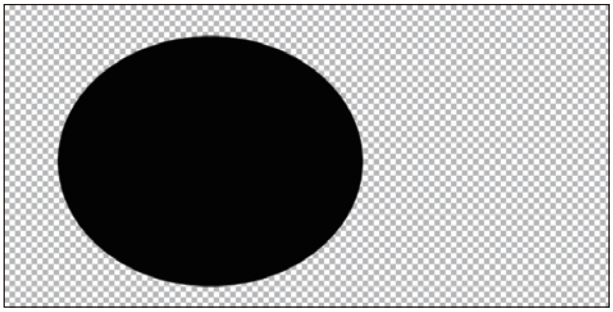
Drawing Colors Available for Expression Color Monochrome

When the expression color is monochrome, the drawing colors that can be used depends on the [Expression color] configured on the [Layer property] palette.

Only black button ON	The drawing color is configured as black or transparent.
Only white button ON	The drawing color is configured as white or transparent.
Both black and white buttons ON	The drawing color is configured as black, white or transparent.

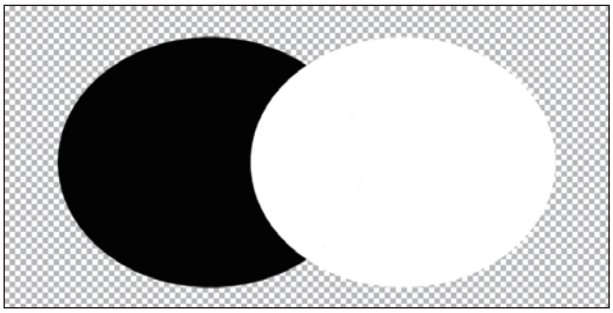
Black

Equivalent to black ink. Use to draw black lines or to fill in black.



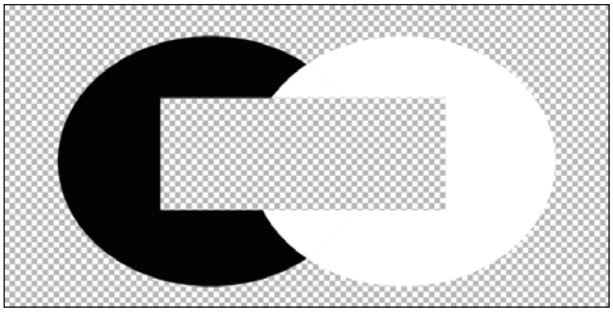
White

Equivalent to white ink. Use to draw white lines or to fill in black. Parts drawn in white are opaque and keep the drawings intact.



Transparent color

A transparent ink capable of deleting drawings in [Black] or [White] drawn on the same layer when overlapped.



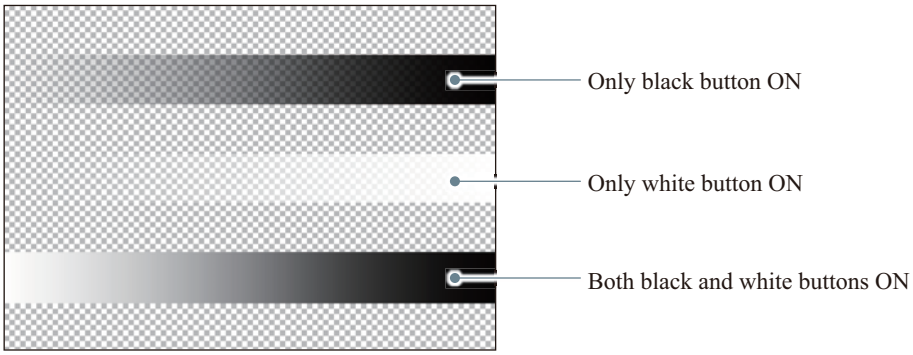
Gray

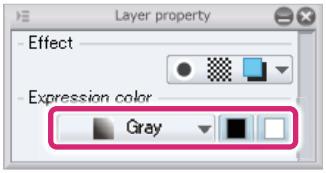
Gray is an expression color that has a color depth of 8 bits. Use to draw illustrations in monochrome with light, delicate touches as with water-colors.

Example of [Gray] drawing

Drawing Colors Available for Expression Color Gray

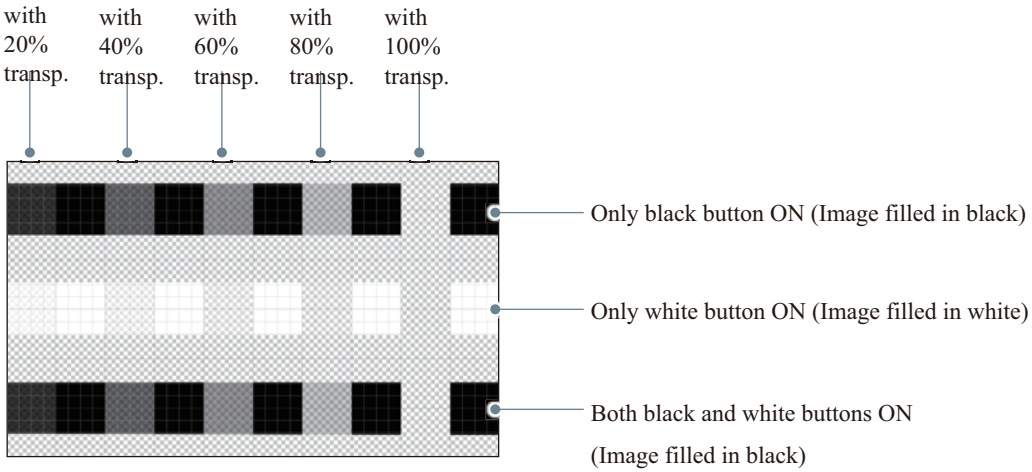
The drawing colors that can be used depends on the [Expression color] configured on the [Layer property] palette.





Only black button ON	The drawing color is configured as a 256-step gradation from black to transparent.
Only white button ON	The drawing color is configured as a 256-step gradation from white to transparent.
Both black and white buttons ON	The drawing color is configured as a 256-step gradation from black to white.

When drawn in transparent, the drawn portions are erased in accordance with the opacity.


with 20% transp.
with 40% transp.
with 60% transp.
with 80% transp.
with 100% transp.
Only black button ON (Image filled in black)
Only white button ON (Image filled in white)
Both black and white buttons ON (Image filled in black)

Color

Color is an expression color that has a color depth of 32 bits. Use to draw illustrations in full color.

Example of [Color] drawing

Regarding the Layer Color

[Layer color] on the [Layer property] palette allows you to display images in one color. Use to check the content drawn in a particular layer while drawing. For example, this is convenient to distinguish the draft and inked drawings.

Memo

For details on how to configure, see "Layer property palette" .

Shortcut List

This chapter provides a list of default Manga Studio 5.0 shortcuts.

Manga Studio 5.0 Common Shortcuts

Manga Studio 5.0 common shortcuts are as follows.

Operation as a result of the use of the shortcut	Shortcut settings
Switch to previous sub tool	, (comma)
Switch to next sub tool	. (period)
Hand	Space
Rotate	Shift + Space
Zoom (scale up)	Ctrl + Space Mac OS X users: After pressing the [Space] key, press [Command] key
Zoom (scale down)	Alt + Space
Switch main and sub colors	X
Switch drawing and transparent colors	C
Layer selection	Ctrl + Shift

Shortcuts Usable during Operation

Shortcuts that can be used while operating a tool are as follows.

When the [Zoom] Tool Is Selected

Shortcuts that can be used when the [Zoom] tool is selected are as follows.

Tool Status	Operation as a result of the use of the shortcut	Shortcut settings
Common	Scale up	Click
	Scale down	Alt + Click

When the [Move] (Rotate) Tool Is Selected

Shortcuts that can be used when the [Move] (Rotate) tool is selected are as follows.

Tool Status	Operation as a result of the use of the shortcut	Shortcut settings
Common	Rotate by 45 degrees each time	Shift

When the [Object] Tool Is Selected

Shortcuts that can be used when the [Object] tool is selected are as follows.

Tool Status	Operation as a result of the use of the shortcut	Shortcut settings
During transform	Fix aspect	Shift
	Scale up/down with reference to the center of rotation	Alt
During rotate	Rotate by 45 degrees each time	Shift
During move	Fix translation direction	Shift
Add selection		Shift
While operating a guide of the perspective ruler	Infinity	Shift
Before operation	Eye dropper	Alt

When the [Object] Tool (3D Material) Is Selected

The mouse operation when a 3D material is selected with the [Object] tool is as follows.

Mouse operation	Operation as a result of the mouse operation
Left click 3D material	Select part
Left drag 3D material	Move part
Left drag other than 3D material	Move camera
Right click part	Fix joint
Right click other than 3D material	Release all fixed joints
Right drag	Move camera back and forth

When [Layer selection] Tool Is Selected

Shortcuts that can be used when the [Layer selection] tool is selected are as follows.

Tool Status	Operation as a result of the use of the shortcut	Shortcut settings
Before operation	Add to current selection	Shift
	Delete from current selection	Alt

When [Move layer] Tool Is Selected

Shortcuts that can be used when the [Layer move] tool is selected are as follows.

Tool Status	Operation as a result of the use of the shortcut	Shortcut settings
Common	Fix translation direction	Shift

When [Marquee] tool (Rectangle/Ellipse) Is Selected

Shortcuts that can be used when the [Marquee] tool (Rectangle/Ellipse) is selected are as follows.

Tool Status	Operation as a result of the use of the shortcut	Shortcut settings
Common	Interlock selection area and image	Ctrl + drag
Before operation	Add to current selection	Shift
	Delete from current selection	Alt
	Select from current selection	Shift + Alt
During creation	Fix aspect	Shift
During selection drag	Fix translation direction	Shift
During rotate	Rotate by specified angle each time	Shift

When [Marquee] tool (Lasso) Is Selected

Shortcuts that can be used when the [Marquee] tool (Lasso) is selected are as follows.

Tool Status	Operation as a result of the use of the shortcut	Shortcut settings
Common	Interlock selection area and image	Ctrl + drag
Before operation	Add to current selection	Shift
	Delete from current selection	Alt
	Select from current selection	Shift + Alt
During selection drag	Fix translation direction	Shift

When [Marquee] tool (Selection pen/Selection eraser) Is Selected

Shortcuts that can be used when the [Marquee] tool (Selection pen/Selection eraser) is selected are as follows.

Tool Status	Operation as a result of the use of the shortcut	Shortcut settings
Common	Interlock selection area and image	Ctrl + drag
Before operation	Make (brush size) thicker	]
	Make (brush size) thinner	[
	Change brush size	Ctrl + Alt + drag
	Add to current selection	Shift
	Delete from current selection	Alt
	Select from current selection	Shift + Alt
During selection drag	Fix translation direction	Shift

When [Marquee] tool (Shrink selection) Is Selected

Shortcuts that can be used when the [Marquee] tool (Shrink selection) is selected are as follows.

Tool Status	Operation as a result of the use of the shortcut	Shortcut settings
Common	Interlock selection area and image	Ctrl + drag
	Enable/disable multiple referring	0
Before operation	Add to current selection	Shift
	Delete from current selection	Alt
	Select from current selection	Shift + Alt
During selection drag	Fix translation direction	Shift

When [Marquee] tool (Polyline) Is Selected

Shortcuts that can be used when the [Marquee] tool (Polyline selection) is selected are as follows.

Tool Status	Operation as a result of the use of the short-cut	Shortcut settings
Common	Fix	Double click
	Cancel last point	Right click
	Interlock selection area and image	Ctrl + drag
	Cancel	Esc
Before operation	Add to current selection	Shift
	Delete from current selection	Alt
	Select from current selection	Shift + Alt
During creation	Fix line angle	Shift
During selection drag	Fix translation direction	Shift

When [Auto select] Tool Is Selected

Shortcuts that can be used when the [Auto select] tool is selected are as follows.

Tool Status	Operation as a result of the use of the short-cut	Shortcut settings
Common	Interlock selection area and image	Ctrl + drag
	Enable/disable multiple referring	0
Before operation	Temporary switch of multiple referring	Ctrl
	Add to current selection	Shift
	Delete from current selection	Alt
	Select from current selection	Shift + Alt
During selection drag	Fix translation direction	Shift

When [Pen], [Pencil], [Brush], [Airbrush], [Decoration] or [Eraser] Tool Is Selected

Shortcuts that can be used when the [Pen], [Brush], [Watercolor], [Decoration] or [Eraser] tool is selected are as follows.

Memo For [Dot pen] of the [Pen] tool, see "When [Pen] Tool (Dot pen) Is Selected" .

Tool Status	Operation as a result of the use of the short-cut	Shortcut settings
Common	Eye dropper	Alt
	Object	Ctrl
Before operation	Make (brush size) thicker	]
	Make (brush size) thinner	[
	Increase opacity	Ctrl +]
	Decrease opacity	Ctrl + [
	Change brush size	Ctrl + Alt + drag
	Draw straight line	Shift

When [Pen] Tool (Dot pen) Is Selected

Shortcuts that can be used when the [Pen] tool (Dot pen) is selected are as follows.

Tool Status	Operation as a result of the use of the short-cut	Shortcut settings
Common	Eye dropper	Alt
	Object	Ctrl
Before operation	Draw straight line	Shift

When [Blend] Tool (Except Copy stamp) Is Selected

Shortcuts that can be used when the [Blend] tool (except Copy stamp) is selected are as follows.

Tool Status	Operation as a result of the use of the short-cut	Shortcut settings
Common	Eye dropper	Alt
	Object	Ctrl
Before operation	Make (brush size) thicker	]
	Make (brush size) thinner	[
	Increase opacity	Ctrl +]
	Decrease opacity	Ctrl + [
	Change brush size	Ctrl + Alt + drag
	Draw straight line	Shift

When [Blend] Tool (Copy stamp) Is Selected

Shortcuts that can be used when the [Blend] tool (Copy stamp) is selected are as follows.

Tool Status	Operation as a result of the use of the short-cut	Shortcut settings
Common	Object	Ctrl
Before operation	Specify reference point	Alt
	Make (brush size) thicker	]
	Make (brush size) thinner	[
	Increase opacity	Ctrl +]
	Decrease opacity	Ctrl + [
	Change brush size	Ctrl + Alt + drag
	Draw straight line	Shift

When [Fill] Tool (Refer edited layer only, Refer all layers, Close and fill) Is Selected

Shortcuts that can be used when the [Fill] tool (Refer edited layer only, Refer all layers, Close and fill) is selected are as follows.

Tool Status	Operation as a result of the use of the short-cut	Shortcut settings
Common	Enable/disable multiple referring	0
	Eye dropper	Alt
	Object	Ctrl
	Temporary switch of multiple referring	Shift
	Increase opacity	Ctrl +]
	Decrease opacity	Ctrl + [

When [Fill] tool (Paint unfilled area) Is Selected

Shortcuts that can be used when the [Fill] tool (paint unfilled areas) is selected are as follows.

Tool Status	Operation as a result of the use of the short-cut	Shortcut settings
Common	Enable/disable multiple referring	0
	Eye dropper	Alt
	Object	Ctrl
	Temporary switch of multiple referring	Shift
	Make (brush size) thicker	]
	Make (brush size) thinner	[
	Increase opacity	Ctrl +]
	Decrease opacity	Ctrl + [
	Change brush size	Ctrl + Alt + drag

When [Gradient] Tool Is Selected

Shortcuts that can be used when the [Gradient] tool is selected are as follows.

Tool Status	Operation as a result of the use of the short-cut	Shortcut settings
Common	Eye dropper	Alt
	Object	Ctrl
During creation	Fix line angle	Shift
	Fix aspect	Shift

When [Figure] Tool (Straight Line/Curve) Is Selected

Shortcuts that can be used when the [Figure] tool (Straight Line/Curve) is selected are as follows.

Tool Status	Operation as a result of the use of the short-cut	Shortcut settings
Common	Fix line angle	Shift
	Fix	Enter
	Cancel	Esc
	Eye dropper	Alt
	Object	Ctrl
Before operation	Make (brush size) thicker	]
	Make (brush size) thinner	[
	Increase opacity	Ctrl +]
	Decrease opacity	Ctrl + [
	Change brush size	Ctrl + Alt + drag

When [Figure] Tool (Continuous curve/Polyline) Is Selected

Shortcuts that can be used when the [Figure] tool (Continuous curve/Polyline) is selected are as follows.

Tool Status	Operation as a result of the use of the short-cut	Shortcut settings
Common	Fix	Enter
	Cancel last point	Delete/Right click
	Cancel	Esc
	Object	Ctrl
Before operation	Make (brush size) thicker	]
	Make (brush size) thinner	[
	Increase opacity	Ctrl +]
	Decrease opacity	Ctrl + [
	Change brush size	Ctrl + Alt + drag
	Eye dropper	Alt
During creation	Rectangle	Alt
	Fix line angle	Shift

When [Figure]Tool (Rectangle/Ellipse) Is Selected

Shortcuts that can be used when the [Figure] tool (Rectangle/Ellipse) is selected are as follows.

Tool Status	Operation as a result of the use of the short-cut	Shortcut settings
Common	Fix aspect	Shift
	Fix	Enter
	Cancel	Esc
	Eye dropper	Alt
	Object	Ctrl
Before operation	Make (brush size) thicker	]
	Make (brush size) thinner	[
	Increase opacity	Ctrl +]
	Decrease opacity	Ctrl + [
	Change brush size	Ctrl + Alt + drag
During rotate	Rotate by specified angle each time	Shift

When [Figure]Tool (Rectangle frame) Is Selected

Shortcuts that can be used when the [Figure] tool (Rectangle frame) is selected are as follows.

Tool Status	Operation as a result of the use of the short-cut	Shortcut settings
Common	Fix aspect	Shift
	Fix	Enter
	Cancel	Esc
	Eye dropper	Alt
	Object	Ctrl
Before operation	Make (brush size) thicker	]
	Make (brush size) thinner	[
	Change brush size	Ctrl + Alt + drag
During rotate	Rotate by specified angle each time	Shift

When [Figure]Tool (Polyline frame) Is Selected

Shortcuts that can be used when the [Figure] tool (Polyline frame) is selected are as follows.

Tool Status	Operation as a result of the use of the short-cut	Shortcut settings
Common	Fix	Enter
	Cancel last point	Delete/Right click
	Cancel	Esc
	Eye dropper	Alt
	Object	Ctrl
Before operation	Make (brush size) thicker	]
	Make (brush size) thinner	[
	Change brush size	Ctrl + Alt + drag
During creation	Rectangle	Alt
	Fix line angle	Shift

When [Figure]Tool (Divide frame border/Divide frame folder) Is Selected

Shortcuts that can be used when the [Figure] tool (Divide frame border/Divide frame folder) is selected are as follows.

Tool Status	Operation as a result of the use of the short-cut	Shortcut settings
Common	Object	Ctrl
	Fix line angle	Shift
	Rectangle	Alt

When [Figure] Tool (Straight line ruler) Is Selected

Shortcuts that can be used when the [Figure] tool (Straight line ruler) is selected are as follows.

Tool Status	Operation as a result of the use of the short-cut	Shortcut settings
Common	Object	Ctrl
	Fix line angle	Shift
	Fix	Enter
	Cancel	Esc

When [Figure] Tool (Curve ruler) Is Selected

Shortcuts that can be used when the [Figure] tool (Curve ruler) is selected are as follows.

Tool Status	Operation as a result of the use of the short-cut	Shortcut settings
Common	Object	Ctrl
	Fix line angle	Shift
	Rectangle	Alt
	Fix	Enter
	Cancel	Esc

When [Figure] Tool (Figure ruler) Is Selected

Shortcuts that can be used when the [Figure] tool (Figure ruler) is selected are as follows.

Tool Status	Operation as a result of the use of the short-cut	Shortcut settings
Common	Object	Ctrl
	Fix aspect	Shift
	Fix	Enter
	Cancel	Esc
During rotate	Rotate by specified angle each time	Shift

When [Figure] Tool (Ruler pen) Is Selected

Shortcuts that can be used when the [Figure] tool (Ruler pen) is selected are as follows.

Tool Status	Operation as a result of the use of the short-cut	Shortcut settings
Common	Object	Ctrl
	Draw straight line	Shift

When [Figure] Tool (Special ruler) Is Selected

Shortcuts that can be used when the [Figure] tool (Special ruler) is selected are as follows.

Tool Status	Operation as a result of the use of the short-cut	Shortcut settings
Common	Object	Ctrl
	Fix aspect	Shift
	Rectangle	Alt
	Fix	Enter
	Cancel	Esc
During rotate	Rotate by specified angle each time	Shift

When [Figure] Tool (Guide) Is Selected

Shortcuts that can be used when the [Figure] tool (Guide) is selected are as follows.

Tool Status	Operation as a result of the use of the short-cut	Shortcut settings
Common	Object	Ctrl

When [Figure] Tool (Perspective ruler) Is Selected

Shortcuts that can be used when the [Figure] tool (Perspective ruler) is selected are as follows.

Tool Status	Operation as a result of the use of the short-cut	Shortcut settings
Common	Object	Ctrl
During creation	Fix orientation in steps of 45°	Shift

When [Figure] Tool (Stream line/Dark saturated line) Is Selected *

Shortcuts that can be used when the [Figure] tool (Stream line/Dark saturated line) is selected are as follows.

Tool Status	Operation as a result of the use of the shortcut	Shortcut settings
Common	Fix	Enter
	Cancel last point	Delete/Right click
	Cancel	Esc
	Eye dropper	Alt
	Object	Ctrl
Before operation	Make (brush size) thicker	]
	Make (brush size) thinner	[
	Increase opacity	Ctrl +]
	Decrease opacity	Ctrl + [

When [Figure] Tool (Saturated line other than dark) Is Selected *

Shortcuts that can be used when the [Figure] tool (Saturated line other than dark) is selected are as follows.

Tool Status	Operation as a result of the use of the shortcut	Shortcut settings
Common	Fixed aspect	Shift
	Fix	Enter
	Cancel	Esc
	Eye dropper	Alt
	Object	Ctrl
Before operation	Make (brush size) thicker	]
	Make (brush size) thinner	[
	Increase opacity	Ctrl +]
	Decrease opacity	Ctrl + [
During rotate	Rotate by specified angle each time	Shift

When [Text] Tool (Text) Is Selected

Shortcuts that can be used when the [Text] tool (Text) is selected are as follows.

Tool Status	Operation as a result of the use of the short-cut	Shortcut settings
Common	Eye dropper	Alt
	Object	Ctrl

When [Text] Tool (Elliptical balloon) Is Selected

Shortcuts that can be used when the [Text] tool (Elliptical balloon) is selected are as follows.

Tool Status	Operation as a result of the use of the short-cut	Shortcut settings
Common	Fix aspect	Shift
	Fix	Enter
	Cancel	Esc
	Eye dropper	Alt
	Object	Ctrl
Before operation	Make (brush size) thicker	]
	Make (brush size) thinner	[
	Change brush size	Ctrl + Alt + drag
During rotate	Rotate by specified angle each time	Shift

When [Text] Tool (Curve balloon) Is Selected

Shortcuts that can be used when the [Text] tool (Curve balloon) is selected are as follows.

Tool Status	Operation as a result of the use of the short-cut	Shortcut settings
Common	Fix	Enter
	Cancel last point	Delete/Right click
	Cancel	Esc
	Object	Ctrl
Before operation	Make (brush size) thicker	]
	Make (brush size) thinner	[
	Change brush size	Ctrl + Alt + drag
	Eye dropper	Alt
During creation	Rectangle	Alt
	Fix line angle	Shift

When [Text] Tool (Balloon pen) Is Selected

Shortcuts that can be used when the [Text] tool (Balloon pen) is selected are as follows.

Tool Status	**Operation as a result of the use of the short-cut**	**Shortcut settings**
Common	Eye dropper	Alt
	Object	Ctrl
Before operation	Make (brush size) thicker	]
	Make (brush size) thinner	[
	Change brush size	Ctrl + Alt + drag

When [Text] Tool (Balloon tail/Thought balloon tail) Is Selected

Shortcuts that can be used when the [Text] tool (Balloon tail/Thought balloon tail) is selected are as follows.

Tool Status	**Operation as a result of the use of the short-cut**	**Shortcut settings**
Common	Fix	Enter
	Cancel	Esc
	Object	Ctrl
During creation	Rectangle	Alt

When [Text] Tool (Flash) Is Selected *

Shortcuts that can be used when the [Text] tool (Flash) is selected are as follows.

Tool Status	Operation as a result of the use of the shortcut	Shortcut settings
Common	Fixed aspect	Shift
	Fix	Enter
	Cancel	Esc
	Eye dropper	Alt
	Object	Ctrl
Before operation	Make (brush size) thicker	]
	Make (brush size) thinner	[
	Increase opacity	Ctrl +]
	Decrease opacity	Ctrl + [
During rotate	Rotate by specified angle each time	Shift

When [Correct line] Tool (Control point) Is Selected

Shortcuts that can be used when the [Correct line] tool (Control point) is selected are as follows.

Tool Status	Operation as a result of the use of the shortcut	Shortcut settings
Common	Fix translation direction	Shift
	Add control point	Shift
	Delete control point	Alt
	Switch corner	Shift + Alt

When [Correct line] Tool (Simplify Vector Line) Is Selected

Shortcuts that can be used when the [Correct line] tool (Vector line simplification) is selected are as follows.

Tool Status	Operation as a result of the use of the shortcut	Shortcut settings
Common	Object	Ctrl
Before operation	Change brush size	Ctrl + Alt + drag

When [Correct line] Tool (Pinch vector line) Is Selected

Shortcuts that can be used when the [Correct line] tool (Pinch vector line) is selected are as follows.

Tool Status	Operation as a result of the use of the shortcut	Shortcut settings
Common	Object	Ctrl
	Fix translation direction	Shift
Before operation	Change pinch area	Ctrl + Alt + drag

When [Correct line] Tool (Connect line) Is Selected

Shortcuts that can be used when the [Correct line] tool (Connect line) is selected are as follows.

Tool Status	Operation as a result of the use of the shortcut	Shortcut settings
Common	Object	Ctrl
Before operation	Change brush size	Ctrl + Alt + drag

When [Correct correct line] Tool (Redraw line width) Is Selected

Shortcuts that can be used when the [Correct line] tool (Redraw line width) is selected are as follows.

Tool Status	Operation as a result of the use of the short-cut	Shortcut settings
Common	Object	Ctrl
Before operation	Change brush size	Ctrl + Alt + drag

When [Correct line] Tool (Correct line width) Is Selected

Shortcuts that can be used when the [Correct line] tool (Correct line width) is selected are as follows.

Tool Status	Operation as a result of the use of the short-cut	Shortcut settings
Common	Object	Ctrl
Before operation	Change brush size	Ctrl + Alt + drag

When [Correct line] Tool (Redraw Vector Line) Is Selected

Shortcuts that can be used when the [Correct line] tool (Redraw Vector Line) is selected are as follows.

Tool Status	Operation as a result of the use of the short-cut	Shortcut settings
Common	Object	Ctrl

When [Garbage cleaner] Tool (Garbage cleaner) Is Selected

Shortcuts that can be used when the [Garbage cleaner] tool (Garbage cleaner) is selected are as follows.

Tool Status	Operation as a result of the use of the short-cut	Shortcut settings
Before operation	Object	Ctrl
	Temporary switch of multiple referring	Shift
	Eye dropper	Alt
During area specification	Fix aspect	Shift

When [Garbage cleaner] Tool (Fill leftover) Is Selected

Shortcuts that can be used when the [Garbage cleaner] tool (Fill leftover) is selected are as follows.

Tool Status	Operation as a result of the use of the short-cut	Shortcut settings
Before operation	Object	Ctrl
	Temporary switch of multiple referring	Shift
	Eye dropper	Alt
	Change brush size	Ctrl + Alt + drag

When [Garbage cleaner] Tool (Select dust) Is Selected

Shortcuts that can be used when the [Garbage cleaner] tool (Select dust) is selected are as follows.

Tool Status	Operation as a result of the use of the short-cut	Shortcut settings
Common	Interlock selection area and image	Ctrl + drag
	Enable/disable multiple referring	0
Before operation	Add to current selection	Shift
	Delete from current selection	Alt
	Select from current selection	Shift + Alt
During selection area drag	Fix translation direction	Shift

When [Edit] Menu → [Transform] Is Selected

Shortcuts that can be used when [Edit] menu → [Transform] is selected are as follows.

Tool Status	Operation as a result of the use of the short-cut	Shortcut settings
Common	Fix	Enter
	Cancel	Esc
Scale up/down/Rotate	Fix aspect	Shift
	Scale up/down with reference to the center of rotation	Alt
	Free transform	Ctrl
During free transform	Scale up/down/Rotate (Fix aspect)	Shift
	Scale up/down with reference to the center of rotation	Alt
During rotate	Rotate by 45 degrees each time	Shift
During move	Fix translation direction	Shift

Tool Shortcuts

Shortcuts for tool switching are as follows.
When a key is long pressed, the tool switches during the time the key is pressed.

Tool after switch	Key to input
Zoom	/
Move (Hand)	H
Move (Rotate)	R
Pen	P
Pencil	P
Brush	B
Airbrush	B
Decoration	B
Eraser	E
Blend	J
Fill	G
Gradient	G
Auto select	W
Selection area	M
Figure	U
Eye dropper	I
Move layer	K
Operation (Object)	O
Operation (Layer selection)	D
Text	T
Correct line /Garbage cleaner	Y

Menu Shortcuts

Menu shortcuts are as follows.

Manga Studio 5.0 Menu [Mac OS X]

Manga Studio 5.0 menu shortcuts are as follows.

Menu item		Shortcut settings
About Manga Studio 5.0 [Mac OS X]		
Version information [Mac OS X]		
Preferences [Mac OS X]		Cmd + K
Shortcut settings [Mac OS X]		Opt + Shift + Cmd+ K
Modifier key settings [Mac OS X]		Opt + Shift + Cmd+ Y
Command bar settings [Mac OS X]		
Tab-Mate Controller [Mac OS X]	Tab-Mate Controller settings [Mac OS X]	
	Quick menu settings [Mac OS X]	
Pen Pressure Settings [Mac OS X]		
QUMARION [Mac OS X]	Use QUMARION [Mac OS X]	
	Import calibration info. [Mac OS X]	
	Export calibration info. [Mac OS X]	
Register license [Mac OS X]		
Check license [Mac OS X]		
Install Material [Mac OS X]		
Organaize Materials [Mac OS X]		
Reset Installed Materials [Mac OS X]		
Quit Manga Studio [Mac OS X]		Cmd + Q

File Menu

File menu shortcuts are as follows.

Menu item		Shortcut settings
New		Ctrl + N
Open		Ctrl + O
Close		Ctrl + W
Save		Ctrl + S
Save as		Shift + Alt + S, Ctrl + Shift + S, Ctrl + Alt + S
Export (Layered)	.lip (Manga Studio 5.0)	
	.lip (Optimized) (Manga Studio 5.0)	
	.psb (Photoshop Big Document)	
	.psd (Photoshop Document)	
Export (Single Layer)	.bmp (BMP)	
	.jpg (JPEG)	
	.png (PNG)	
	.tif (TIFF)	
	.tga (Targa)	
	.psb (Photoshop Big Document)	
	.psd (Photoshop Document)	
Import	Image	
	Pattern from image	
	Scan	
	Select Scan Device	
	Create New From Clipboard	
Print settings		
Printing		Ctrl + P
Preferences [Windows]		Ctrl + K
Shortcut settings [Windows]		Ctrl + Shift + Alt + K
Modifier key settings [Windows]		Ctrl + Shift + Alt + Y
Command bar settings [Windows]		
Tab-Mate Controller [Windows]	Tab-Mate Controller settings [Windows]	
	Quick menu settings [Windows]	
Pen Pressure Settings [Windows]		

Menu item		Shortcut settings
QUMARION [Windows]	Use QUMARION [Windows]	
	Import calibration info. [Windows]	
	Export calibration info. [Windows]	
Install Material [Windows]		
Organaize Materials [Windows]		
Reset Installed Materials [Windows]		
Quit Manga Studio [Windows]		Ctrl + Q

Edit Menu

Edit menu shortcuts are as follows.

Menu item	Shortcut settings
Undo	Ctrl + Z
Redo	Ctrl + Y, Ctrl + Shift + Z
Cut	Ctrl + X, F2
Copy	Ctrl + C, F3
Paste	Ctrl + V, F4
Clear	Del, Back Space, Ctrl + Del, Ctrl + Back Space
Clear outside of selected area	Shift + Del, Shift + Back Space
Fill	Alt + Del, Alt + Back Space
Advanced fill	
Change color of line to drawing *	
Outline Selection []	
Convert brightness to opacity	
Register image as material	
Register layer as template material	

Menu item		Shortcut settings
Color correction	Brightness/Contrast	
	Hue/Saturation/Luminosity	Ctrl + U
	Posterization	
	Reverse gradient	Ctrl + I
	Level correction	
	Tone curve	
	Color balance	
	Binarization	
Transform	Scale up/Scale down/Rotate	Ctrl + T
	Free transform	Ctrl + Shift + T
	Flip horizontal	
	Flip vertical	
	Mesh transformation	
	OK	
	Cancel	
Change image resolution		
Change canvas size		
Crop		
Rotate/Invert canvas	Rotate by 90 degrees clockwise	
	Rotate by 180 degrees	
	Rotate by 90 degrees counter-clockwise	
	Flip horizontal	
	Flip vertical	
Canvas proparties		
Clear memory	History	

Story Menu [EX]

Story menu shortcuts are as follows.

Menu item		Shortcut settings
Open page *		
Open page with new tab *		
To Start Page		
Previous page		
Next page		
Last page		
To specified page		
Add page		
Add page (Detail)		
Import page		
Duplicate page		
Delete page		
Combine pages		
Split pages		
Set Story Information		
Binding Point/Start page		
Page manager		
Page manager layout	Tab	
	Left	
	Right	
	Top	
	Bottom	
Batch process *	Batch process	
	Batch Import	
	Batch export	
	Continuous scanning	

Layer Menu

Layer menu shortcuts are as follows.

Menu item		Shortcut settings
New raster layer		Ctrl + Shift + N
New layer	Raster layer	
	Vector layer	
	Gradient layer	
	Monochrome layer	
	Tone	
	Frame folder	
	Paper	
New correction layer	Brightness/Contrast	
	Hue/Saturation/Luminosity	
	Posterization	
	Reverse gradient	
	Level correction	
	Tone curve	
	Color balance	
	Binarization	
New layer folder		
Duplicate layer		
Delete layer		
Layer Mask	Mask outside selection	
	Mask selection	
	Delete mask	
	Apply mask to layer	
	Enable mask	
	Show mask area	
	Link mask to layer	

Menu item		Shortcut settings
Ruler - Frame	Selection from ruler	
	Delete ruler	
	Show ruler	
	Link ruler to layer	
	Create perspective ruler	
	Divide frame border equally	
	Combine frame	
	Show in all layers	
	Show in same folder	
	Show only when editing target	
Layer Settings	Set as reference layer	
	Set as Draft Layer	
	Clip at layer below	Ctrl + Alt + G
	Lock layer	
	Lock transparent pixel	
	Show layer	
	Change Layer Name	
	Advanced settings	
Selection from layer	Create selection	
	Add selection	
	Delete selection	
	Select overlapping area	
Rasterize		
Convert layer		
LT conversion of layer [EX] *		
Transfer to lower layer		
Combine to layer below		Ctrl + E
Combine selected layer		Shift + Alt + E
Combine showing layer		Ctrl + Shift + E
Combine copies of displayed layer *		
Merge layers		

Menu item		Shortcut settings
Layer Order	Top	
	Up	
	Down	
	Bottom	
Change selected layer	Layer above	Alt +]
	Layer below	Alt + [

Selection Menu

Selection menu shortcuts are as follows.

Menu item	Shortcut settings
Select all	Ctrl + A
Clear selection	Ctrl + D
Reselect	Ctrl + Shift + D
Invert selected layer	Ctrl + Shift + I, Shift + F7
Expand Selected area	
Shrink selection	
Blur borders	
Select color gamut	
Select overlapping vectors	
Select vectors within area	
Quick mask	
Convert Selection Layer	
Convert Selection Layer to Selection	

View Menu

View menu shortcuts are as follows.

Menu item		Shortcut settings
Rotate/Invert	Reset Rotate/Invert	
	Reset rotate	
	Rotate 90	
	Rotate 180	
	Rotate 270	
	Flip horizontal	
	Flip vertical	
	Rotate left	-
	Rotate right	^
Zoom in		Ctrl + Num + , (comma) Ctrl + ;
Zoom out		Ctrl + Num - , Ctrl + -
Pixel size		Ctrl + Alt + 0
Fit to Screen		Ctrl + 0
Reset display		Ctrl + @
Fit to Navigator		
Grid		
Ruler		Ctrl + R
Grid settings		
Scroll bar		
Selection Border		
Selection Launcher		
Selection Launcher Settings		
Crop mark/Default border		
Crop Mark/default border settings		
Story Information [EX]		
Paper		
Change Display Of Tone Area	Show Selected Tone Area	
	Show All Tone Areas	
	Include Image Material Area	
Paper		

Menu item		Shortcut settings
Snap to ruler		Ctrl + 1
Snap to special ruler		Ctrl + 2
Snap to grid		Ctrl + 3
Change special ruler snap		Ctrl + 4
Color profile	Preview settings	
	Preview	

Filter Menu

Filter menu shortcuts are as follows.

Menu item		Shortcut settings
Blur	Blur	
	Blur (Strong)	
	Gaussian blur	
	Smoothing	
	Radial blur	
	Movable blur	
Sharp	Unsharp mask	
	Sharp *	
	Sharp (Strong) *	
Effect	Mosaic	
Draw	Perlin noise	

Window Menu

Window menu shortcuts are as follows.

Menu item		Shortcut settings
Canvas	New window	
	Cascade	
	Tiled	
Workspace	Reset to default	
	Register workspace	
	Manage workspace	
	Reset workspace	
Command bar		
Tool		
Sub Tool		
Tool Property		
Brush Size		
Sub tool detail		
Color Wheel		
Color Slider		
Color Set		
Intermediate Color		
Approximate Color		
Layer		
Search Layer		
Layer Property		
Navigator		
Sub View		
History		
Auto Action		
Information		

Menu item		Shortcut settings
Material	Material (1)	
	Material (2)	
	Material (3)	
	Material (4)	
	Material (5)	
	Material (6)	
	Material (7)	
	Material (8)	
	Material (9)	
	Material (10)	
Show/Hide All Palette		Tab
Hide Title Bar/Hide Menu Bar		Shift + Tab
Show Canvas Tab		

Help Menu

Help menu shortcuts are as follows.

Menu item	Shortcut settings
Manga Studio 5.0 website	
Manga Studio 5.0 Manual	F1
Training and Tutorials	
Manga Studio 5.0 Support	
Graphics performance check	
Register license [Windows]	
Check license [Windows]	
About Manga Studio 5.0 [Windows]	
Version information [Windows]	

Optional shortcuts

The following shows the shortcuts that can be configured when [Option] is selected in [Setting area] in the [Shortcut settings] dialog box.

Canvas

The shortcuts operated on the [Canvas] window are as follows.

Operation items		Shortcut settings
View	Scroll to left	
	Scroll to right	
	Scroll to above	
	Scroll to below	
Ruler	Move the ruler to left	
	Move the ruler to right	
	Move the ruler to above	
	Move the ruler to below	
	Rotate the ruler clockwise	
	Rotate the ruler counter-clockwise	
	Scale up the ruler	
	Scale down the ruler	
	Move the center of rotation of the ruler to the center of the window	
Perspective ruler	ON/OFF of snap of the first vanishing point	
	ON/OFF of snap of the second vanishing point	
	ON/OFF of snap of the third vanishing point	
	ON/OFF of snaps of all vanishing points	
	Snap only the first vanishing point	
	Snap only the second vanishing point	
	Snap only the third first vanishing point	

Tool property palette

The shortcuts operated on the [Tool property] palette are as follows.

Operation items		Shortcut settings
Brush size	Increase brush size	
	Reduce brush size	
	Turn ON/OFF the allocation of the pen pressure to the brush size	
Ink	Decrease opacity	Ctrl + [
	Increase opacity	Ctrl +]
	Set opacity 10%	
	Set opacity 20%	
	Set opacity 30%	
	Set opacity 40%	
	Set opacity 50%	
	Set opacity 60%	
	Set opacity 70%	
	Set opacity 80%	
	Set opacity 90%	
	Set opacity 100%	
	ON/OFF of Mixed Ground Color	
	Decrease Amount of Paint	
	Increase Amount of Paint	
	Decrease Density of Paint	
	Increase Density of Paint	
	Decrease Color Stretch	
	Increase Color Stretch	
Anti-aliasing	Set anti-aliasing none"	
	Set anti-aliasing weak	
	Set anti-aliasing middle	
	Set anti-aliasing strong	
	On/Off of anti-aliasing	

Operation items		Shortcut settings
Brush tip	Reduce hardness	
	Increase hardness	
	Reduce brush density	
	Increase brush density	
	Set Brush Density to 10%	
	Set Brush Density to 20%	
	Set Brush Density to 30%	
	Set Brush Density to 40%	
	Set Brush Density to 50%	
	Set Brush Density to 60%	
	Set Brush Density to 70%	
	Set Brush Density to 80%	
	Set Brush Density to 90%	
	Set Brush Density to 100%	
	On/Off of allocating pen pressure to the brush density	
	Decrease Thickness	
	Increase Thickness	
	Rotate Counterclockwise	
	Rotate Clockwise	
Spraying effect	Increase particle size	
	Reduce particle size	
	Reduce particle density	
	Increase particle density	
Border of watercolor	ON/OFF of Watercolor border	
Clear	On/Off of erase vector	
	Set erase vector at touched part	
	Set erase vector up to intersection	
	Set erase vector for whole l line	

Operation items		Shortcut settings
Correction	Reduce stabilizer	
	Increase stabilizer	
	On/Off of post correction	
	Reduce post correction	
	Increase post correction	
	ON/OFF of Vector Magnet	
	Decrease Vector Magnet	
	Increase Vector Magnet	
Starting and ending	On/Off of allocating starting and ending to brush size	
	On/Off of allocating starting and ending to the brush density	
	On/Off of starting	
	On/Off of ending	
Anti-overflow	ON/OFF of Not out of line of reference layer	
Selection area	Set method to create \"Select new\"	
	Set method to create \ "Select additionally\"	
	Set method to create \"Deselect partially\"	
	Set method to create \"Select already selected par\t"	
Fill	On/Off of following adjacent pixel	
	On/Off of closing gap	
	On/Off of scaling area	
Figure	On/Off of specifying aspect	
	On/Off of starting from center	
	On/Off of rotating after fixed	
Reference	On/Off of multiple referring	0
Pinch vector line	Reduce pinch level	
	Increase pinch level	
	Reduce effect area	
	Increase effect area	

Brush size Palette

The shortcuts operated on the [Brush size] palette are as follows.

Operation items	Shortcut settings
Select a smaller preset than the current one	[
Select a larger preset than the current one	]

Sub tool palette

The shortcuts operated on the [Sub tool] palette are as follows.

Operation items	Shortcut settings
Switch to previous sub tool	,
Switch to next sub tool	.
Switch to previous sub tool group	
Switch to next sub tool group	
Lock	
Revert to initial settings	
Register to initial settings	

Layer property Palette

The shortcuts operated on the [Layer property] palette are as follows.

Operation items	Shortcut settings
Enable/disable layer colors	Ctrl + B
Enable/disable binarization by tone	
Switch use of border effect [*	
Enable/disable edge	
Enable/disable Display decrease color	
Enable/disable texture combine	

Drawing color

The shortcuts operated on the drawing color are as follows.

Operation items	Shortcut settings
Switch main and sub colors	X
Switch drawing and transparent colors	C
Switch main, sub, and transparent colors	
Switch to main color	
Switch to sub color	
Switch to transparent color	
Switch main and transparent colors	
Switch sub and transparent colors	
Switch main and sub colors	
Change main color to black and sub color to white	

Others

Other key and mouse operations are as follows.

Layer

By combining the [Layer] palette with key and/or mouse operations, you can perform layer-related operations.

Operation as a result of the use of the shortcut		Shortcut settings
Duplicate layer		Alt + drag layer
Selection from Layer	Create Selection	Ctrl + left click layer thumbnail Ctrl + left click layer mask thumbnail Ctrl + left click ruler icon
	Add Selection	Ctrl + Shift + left click layer thumbnail Ctrl + Shift + left click layer mask thumbnail Ctrl + Shift + left click ruler icon
	Delete Selection	Ctrl + Alt + left click layer thumbnail Ctrl + Alt + left click layer mask thumbnail Ctrl + Alt + left click ruler icon
	Select Overlapping Area	Ctrl + Shift + Alt + left click layer thumbnail Ctrl + Shift + Alt + left click layer mask thumbnail Left click Ctrl + Shift + Alt + left click ruler icon
Show selected layer only		Alt + click [Show/hide layer]
Display [New raster layer] dialog box		Alt + click [New raster layer]
Display [New vector layer] dialog box		Alt + click [New vector layer]

Memo

Operation of [Layer] palette varies depending on the content to select.

- **To target the layer: Click the layer thumbnail.**
- **To target the layer mask: Click the layer mask thumbnail.**
- **To target a ruler: Click the ruler icon.**

Layer mask

By combining the [Layer] palette with key and/or mouse operations, you can perform layer mask-related operations.

Operation as a result of the use of the shortcut	Shortcut settings
Enable/disable mask	Shift + left click mask thumbnail
Show/hide mask area	Alt + left click mask thumbnail
Mask selection	Alt + left click Create mask
Duplicate mask	Alt + drag mask thumbnail

Ruler

By combining the [Layer] palette with key and/or mouse operations, you can perform ruler-related operations.

Operation as a result of the use of the shortcut	Shortcut settings
Enable/disable ruler	Shift + left click ruler icon
Duplicate ruler	Alt + drag ruler icon